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STRUCTURAL ADJUSTMENT, INCOME DISTRIBUTION AND EMPLOYMENT IN ECUADOR

by

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STRUCTURAL ADJUSTMENT, INCOME DISTRIBUTION AND EMPLOYMENT IN ECUADOR

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INTRODUCTION.

Like most Latin American countries, Ecuador was strongly affected by the debt crisis that was sparked in 1982. The impact, however, was particularly severe in Ecuador, as a decade-long period of oil-induced rapid growth and import substituting industrialization suddenly ended. In the following years, economic stagnation and social deterioration prevailed while the country slowly adopted structural adjustment policies and shifted to an export promotion strategy.

The main objective of this article is to evaluate the social effects of structural adjustment in Ecuador, with emphasis on income distribution, poverty, and employment. It begins with a brief analysis of the Ecuadorean experience in the Latin American context, followed by an overview of structural adjustment policies (SAPs) in Ecuador, and a study of their economic results and social effects. As household survey annual information is available only for the urban sector from 1988 onwards, the analysis will focus on the urban sector during the 1988-1993 period. Finally, an overall evaluation of the country's performance will be presented.

ECUADOR IN THE LATIN AMERICAN CONTEXT.

Since this case study forms part of a comparative project on the Latin American experience, an initial evaluation of Ecuador's performance in the regional context is called for. From this perspective, some general and distinctive features of the country's experience can be identified.

To provide an introductory overview, I selected several economic indicators comparing 1993 with 1980. (see Table 1). Broadly speaking, the regional economic performance has been strongly affected by the crisis, and the recent recovery is still weak and concentrated in a limited group of countries. In 1993, per capita GDP was lower than in 1980, and in 1994 it still remained 2.4 % below the 1980 level[1]. In spite of the adoption of an export promotion strategy, regional per capita export purchasing power in 1993 was only 9% higher than in 1980.[2] Despite the 1990s recovery, the annual growth rate of export purchasing power between 1980 and 1993 was 2.7%, scarcely above the population growth rate (2%).

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[1] See: CEPAL, **Preliminary Overview of the Latin American and Caribbean Economy**, 1994.

[2] Export purchasing power is calculated by deflating export quantum by terms of trade indices. Terms of trade are defined as the quotient of the Paasche unit value indices for exports and imports, both referring to the same base.

TABLE 1

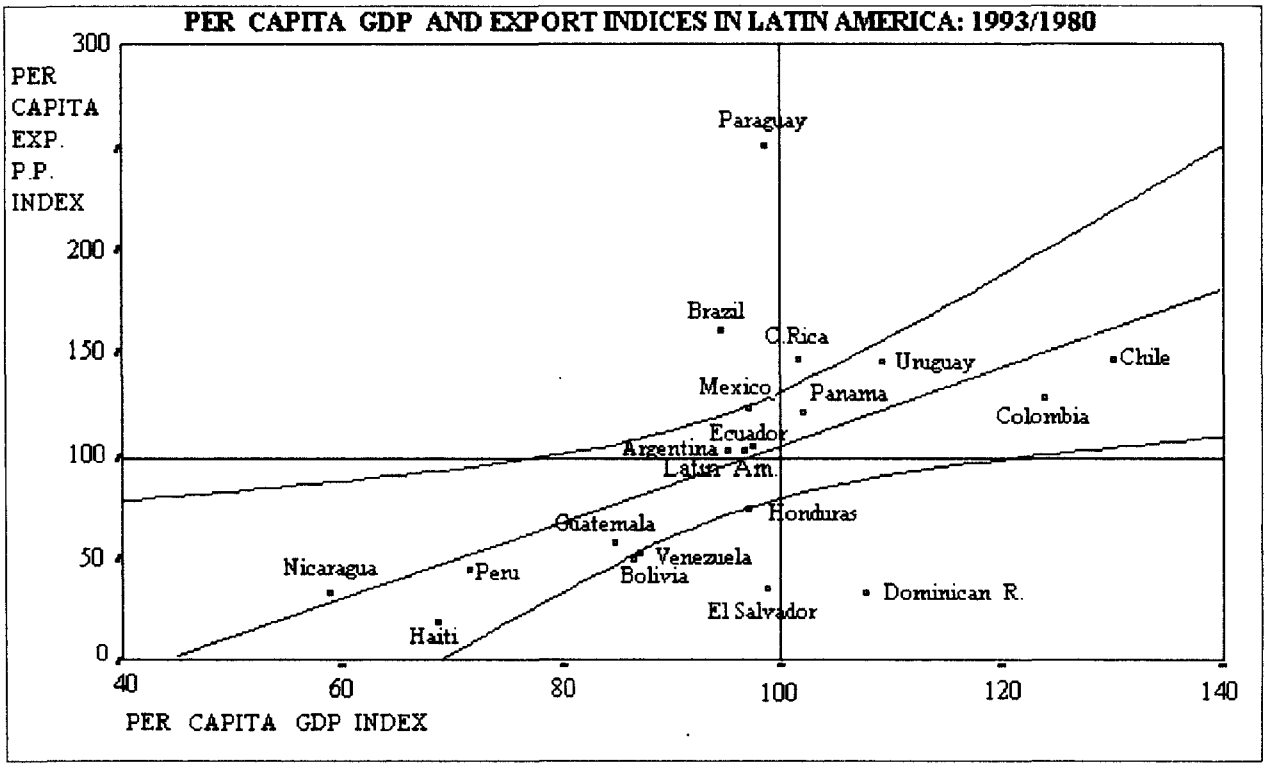
LATIN AMERICA'S PER CAPITA GDP AND EXPORTS: 1980-1993

Country	Population Index: 1993 (1980=100)	Per Capita GDP (1980 US$) 1970	1980	1993	Per Capita GDP Index: 1993 (1980=100)	Export Indices: (1980=100) Quantum	Terms of Trade	Purchasing Power	Per Capita Purchasing Power
Argentina	120.1	3683	4129	3936	95.3	200.5	61.9	124.0	103.2
Bolivia	131.9	709	817	707	86.5	144.4	46.6	67.3	51.0
Brazil	129.0	1107	2007	1901	94.7	254.4	81.4	207.1	160.5
Chile	123.5	2123	2315	3013	130.2	254.3	71.1	180.8	146.3
Colombia	128.1	897	1225	1518	124.0	236.8	69.6	164.8	128.6
Costa Rica	143.1	1201	1552	1577	101.6	252.6	83.2	210.1	146.8
Ecuador	137.9	824	1443	1396	96.7	221.5	64.1	142.0	102.9
El Salvador	121.9	720	723	714	98.8	94.3	46.5	43.8	35.9
Guatemala	145.0	856	1128	954	84.5	102.5	82.1	84.2	58.1
Haiti	128.8	191	257	176*	68.7	41.9	58.0	24.3	18.9
Honduras	149.5	561	705	685	97.1	107.8	102.9	110.9	74.2
Mexico	130.2	1821	2604	2527	97.1	265.5	60.7	161.1	123.7
Nicaragua	146.9	981	739	435	59.0	98.5	49.4	48.7	33.1
Panama	130.2	1383	1789	1827	102.1	153.2	103.3	158.3	121.6
Paraguay	149.9	752	1297	1278	98.6	305.8	123.0	376.3	251.0
Peru	132.2	1066	1188	850	71.5	89.9	66.3	59.6	45.1
Dominican R.	132.4	749	1130	1218	107.8	86.5	51.4	44.4	33.5
Uruguay	108.1	1760	2286	2499	109.3	177.1	88.7	157.1	145.4
Venezuela	138.6	4786	4082	3556	87.1	135.8	54.2	73.7	53.2
Latin America	129.1	1602	2162	2099	97.1	203.4	66.6	140.6	108.9

(*) 1992

Source: ECLAC, **Statistical Yearbook for Latin America and the Caribbean**. 1994.

CHART 1



Source: Table 1.
Note: A regression line and 95% confidence intervals for the unweighted cases have been added.

Growth in export quantum, nevertheless, was high, at 5.6% per year. Declining terms of trade explain the difference. As 64% of regional exports in 1992 were primary products, and the weight of traditional goods --such as textiles-- among manufactured exports is high, Latin America is particularly vulnerable to worsening terms of trade.

Latin American performance is also uneven among countries. To summarize Table 1, two indices --Per capita GDP and per capita export purchasing power-- are plotted in Chart 1. Only five countries --Chile, Colombia, Uruguay, Costa Rica and Panama-- were able to improve in both variables. Among them, Chile and Uruguay implemented most of their structural adjustment programs in the 1970s, Colombia was one of the countries less affected by the debt crisis, and Costa Rica has maintained an impressive tradition in social development and human capital formation since the 1948 revolution.

Analysing the quadrants in Chart 1, three main groups can be identified:[3] countries that performed well on both variables, those with an improvement in export performance and a decline in per capita income, and those with declines in both variables. The largest and most diversified countries in the region, Brazil, Mexico and Argentina, are in the second group. By contrast, most of the countries in the third quadrant, the unsuccessful cases, are small and less diversified both in natural endowments and exports.

Ecuador, located hardly above the horizontal line in the second quadrant, is the closest point to the regional average. The country performed better than other Andean (Venezuela, Bolivia and Peru) or Central American and Caribbean counties. Being a less extreme case with no dramatic crises or conflicts --like Peru or Guatemala-- the Ecuadorean experience can be a meaningful example of the economic, social and political problems of SAP and export promotion policies in small Latin American countries.

Additionally, as Ecuador's social structure can be depicted as highly inegalitarian while its social record in poverty, employment and basic needs has been weak, the case can also be interesting for evaluating the effects of current development strategies under difficult social conditions.[4] (Appendix Table 5 contains basic social development indicators for Ecuador, Peru and Costa Rica).

Finally, as Ecuador suddenly moved from an oil export boom in the 1970s to a crisis in the 1980s, the case can also be illustrative of Dutch disease problems. Other Latin American oil exporting countries experienced severe economic setbacks and social tensions as well.

STRUCTURAL ADJUSTMENT POLICIES IN ECUADOR: AN OVERVIEW[5]

Ecuador experienced rapid economic growth during the 1970s, when the country became an oil exporter. The domestic reinvestment of export earnings led to a rapid process of Import Substituting Industrialization (ISI) and agricultural modernization. Sectoral performance, however, was uneven. While manufacturing and construction expanded quickly, per capita agricultural

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[3] To create four meaningful quadrants, the origin of the chart has been translated to P(100,100).

[4] See Carlos Larrea, "The Mirage of Development: Oil, Employment and Poverty in Ecuador (1972-1990)." Ph.D. Dissertation, York University, 1992.

[5] The main sources about the Ecuadorean structural adjustment experience are Conaghan, De Janvry et al, Grindle and Thoumi, and Larrea. Primary information is mostly taken from the Central Bank of Ecuador and ECLAC. See: Cahterine Conaghan, "Business and the 'Boys': The Politics of Neoliberalism in the Central Andes," **Latin American Research Review, vol 15, N.2 (1990)**; Alain de Janvry, Elisabeth Sadoulet and André Fargeix, **Adjustment and Equity in Ecuador**, Paris: OECD, 1991; Alain de Janvry et al., **The Political Feasibility of Adjustment in Ecuador and Venezuela,** Paris: OECD, 1993; Merilee Grindle and Francisco Thoumi, "Muddling Towards Adjustment: The Political Economy of Policy Change in Ecuador," in Anne Krueger and Robert Bates, eds., **The Political Economy of Structural Adjustment**, (London: Basil Blackwell, 1992); Larrea, "The Mirage of Development: Oil, Employment and Poverty in Ecuador (1972-1990)."

production stagnated. As a capital-and-import intensive growth model was adopted, development policies favored mostly the modern and urban sectors. In spite of rapid urbanization and the expansion of the state apparatus and middle classes, the trickle down effects of economic growth among popular sectors were weak. The adoption of capital intensive technologies led to a disappointing employment performance. In fact, between 1972 and 1980, the percentage of wage earners in the labour force declined in both the urban and rural sectors and severe structural unemployment persisted.[6] In spite of significant achievements in education and health, poverty and basic needs deprivation continued to be widespread.[7] During the late 1970s, as oil exports stagnated, growth was achieved at the cost of foreign borrowing. As the external situation deteriorated, growth strategies became unsustainable and the ISI growth model collapsed when the Latin American debt crisis exploded. To make things worse, Ecuador was hit by two natural disasters in the 1980s -- coastal floods in 1983 and a major earthquake in 1987. Tables 2 and 3, and Appendix Tables 1 and 2 present basic economic information of Ecuador for the period 1965-1994.

Ecuador implemented structural adjustment policies from 1981 onwards. Generally the process can be characterized as gradual, slow, highly conflictive, selective, and still incomplete.

> The achievements of a decade of stabilization and adjustment are disappointing. In contrast to many other Latin American countries, hyper-inflation, social violence, and a return to authoritarianism have all been avoided, yet neither complete stabilization nor the restoration of growth per capita has been achieved.[8]

Ecuador has had five presidents since 1981. Their political positions varied from conservative to social democratic. All of them tried to carry out stabilization programs, with different intensities and priorities. However, none was able to enjoy stable support from the legislature and chronic conflict prevailed.

> The [then] ten year sequence of policy reforms resulted in an overall inadequate performance for stabilization and adjustment for the following reasons: policy initiatives generally were introduced by the executive, only to be atrophied by severe political opposition: the policies introduced were highly unstable; and many of those policies unleashed severe conflicts that led to costly policy enforcement or to equally costly policy reversal.[9]

In contrast to countries where "shock" adjustment prevailed, as in Bolivia in 1985, the process has been slow and lengthy in Ecuador. Social conflict resulted in frequent setbacks and a stable political consensus on economic policies was never reached.

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[6] According to census information, the percentages of wage earners in the labour force declined in the urban sector from 67.2% in 1974 to 65.7% in 1982, and from 40.1% to 38.5% in the countryside. The figures reveal also a reduced diffusion of wage relations, and hence a important underemployment problem.

[7] See Larrea, "The mirage of Development: Oil Employment and Poverty in Ecuador (1972-1990)".

[8] De Janvry, **The Political Feasibility of Adjustment in Ecuador and Venezuela,** p.17.

[9] Ibid. p. 18.

TABLE 2

BASIC ECONOMIC DATA ON ECUADOR: 1965-1994
(1975 sucres)

Year	Population (000s)	GDP (10^9)	Per Capita GDP (1975 S/.)	(1980 US$)	Exports (10^9)	Imports (10^9)	Gross Investment (10^9)	X/GDP (%)	M/GDP (%)	I/GDP (%)	Inflation Rate (%)
1965	4934.4	50706	10276.1		8162	12443	9852	16.1	24.5	19.4	
1966	5089.7	51945	10205.9		8379	13115	10057	16.1	25.2	19.4	3.7
1967	5249.9	55512	10573.9		8742	14905	11692	15.7	26.9	21.1	4.8
1968	5415.1	57749	10664.4		9233	17047	12087	16.0	29.5	20.9	3.1
1969	5585.6	59096	10580.1		7860	16263	13033	13.3	27.5	22.1	5.1
1970	5761.4	62912	10919.6	824.0	8333	17038	13576	13.2	27.1	21.6	5.4
1971	5942.7	66852	11249.4		9293	20555	17190	13.9	30.7	25.7	9.7
1972	6129.8	76493	12479.0		18294	19911	14102	23.9	26.0	18.4	7.4
1973	6322.7	95867	15162.4		32370	20969	15952	33.8	21.9	16.6	12.1
1974	6521.7	102046	15647.1		30837	30189	20194	30.2	29.6	19.8	23.9
1975	6686.3	107740	16113.5		28242	35221	24907	26.2	32.7	23.1	13.2
1976	6855.1	117679	17166.7		30629	34155	25268	26.0	29.0	21.5	10.2
1977	7028.1	125369	17838.3		29095	40175	29181	23.2	32.0	23.3	12.9
1978	7205.5	133632	18545.9		30032	41518	33058	22.5	31.1	24.7	13.1
1979	7387.3	140718	19048.5		31534	41485	32955	22.4	29.5	23.4	10.1
1980	7573.8	147622	19491.1	1443.2	30792	45683	34975	20.9	30.9	23.7	12.8
1981	7765.0	153443	19760.9		32247	41453	32442	21.0	27.0	21.1	14.7
1982	7961.0	155265	19503.3	1442.9	30647	44300	32667	19.7	28.5	21.0	14.7
1983	8142.0	150885	18531.7		31396	33418	24127	20.8	22.1	16.0	48.1
1984	8327.1	157226	18881.2		35331	32613	23035	22.5	20.7	14.7	30.4
1985	8516.5	164054	19263.1	1396.4	39562	35000	24564	24.1	21.3	15.0	28.0
1986	8710.2	169136	19418.2	1401.5	42944	34925	25677	25.4	20.6	15.2	23.0
1987	8908.2	159016	17850.5	1301.2	36027	40286	26800	22.7	25.3	16.9	30.4
1988	9110.8	175742	19289.4	1381.7	47235	36243	25465	26.9	20.6	14.5	57.9
1989	9318.0	176195	18909.1	1351.6	46440	38106	25251	26.4	21.6	14.3	75.4
1990	9529.9	181531	19048.6	1347.4	51159	36692	23961	28.2	20.2	13.2	48.5
1991	9746.6	190384	19533.4	1381.4	56523	42551	26295	29.7	22.4	13.8	48.7
1992	9968.2	197017	19764.5	1396.4	61940	42984	28523	31.4	21.8	14.5	54.6
1993	10194.9	201447	19759.6	1395.8	64552	43309					45.0
1994	10426.7			1419.5							27.3

Sources: INEC, **Censos de Población** (1962, 1974, 1982 and 1990); Banco Central del Ecuador, **Cuentas Nacionales** (several issues); ECLAC, **Statistical Yearbook for Latin America and the Caribbean** (several issues).

TABLE 3

ECUADOR: BASIC EXTERNAL SECTOR INDICATORS (1965-1994) (MILLION US$)

Year	GDP	Exports	Imports	Foreign Debt	Terms of Trade (1970=100)	Oil Real Prices (1972 US$)	Export Purchasing Power (1975 US$)	Import Capacity (1975 US$)
1965	1151	134	170.8		90.8		274.0	
1966	1255	148	171.9		105.4		299.3	
1967	1402	166	214.2		97.2		332.0	
1968	1523	177	255.5		92.7		354.0	
1969	1675	152	241.8		93.4		300.7	
1970	1629	190	273.8	242	100.0		345.8	466
1971	1602	199	340.1	261	93.6		344.9	478
1972	1874	326	318.6	344	84.3	2.4	520.5	611
1973	2489	532	397.3	380	92.4	3.4	728.0	661
1974	3711	1124	678.2	410	192.0	9.4	1262.8	1111
1975	4310	974	987.0	513	159.0	7.4	974.0	920
1976	5317	1258	958.3	693	179.3	7.5	1251.1	1222
1977	6655	1436	1188.5	1264	194.8	7.4	1317.4	1357
1978	7654	1557	1505.1	2975	172.8	6.3	1245.6	1368
1979	9359	2104	1599.7	3554	210.5	10.1	1471.3	1473
1980	11733	2481	2253.3	4601	236.1	14.0	1570.3	1561
1981	13946	2168	1920.6	5868	235.2	14.6	1459.7	1391
1982	13354	2237	2424.6	6633	231.1	14.0	1538.9	1188
1983	11114	2226	1474.6	7381	191.0	12.4	1583.0	969
1984	11510	2620	1630.0	7596	216.7	12.6	1928.2	1168
1985	11890	2905	1766.7	8111	269.2	11.9	2137.9	1221
1986	10515	2186	1810.2	9080	165.0	4.9	1343.2	866
1987	9450	1928	2158.1	10217	202.3	4.9	1051.9	1073
1988	9129	2193	1713.5	10754	178.3	4.0	1119.3	799
1989	9714	2354	1854.8	11039	194.5	5.2	1211.3	1068
1990	10569	2714	1861.7	11700	184.2	5.9	1263.0	983
1991	11554	2851	2398.6	12271	155.4	4.8	1336.6	1111
1992	12483	3008	2430.4	12122	151.3	4.8	1369.6	933
1993		3062	2562.2	12806		4.2	1414.6	
1994		3717	3642.2	13664		4.0	1742.6	

Notes: Oil real prices and export purchasing power were estimated by deflating oil current prices and current exports by the UN price index of manufactures exported by developed countries. Terms of trade are taken from ECLAC estimates, defined as the quotient of the Paasche unit value indices for exports and imports, both referring to the same base.

Sources: Banco Central del Ecuador, **Cuentas Nacionales** (several issues); Banco Central del Ecuador, **Boletin Anuario** (several issues); ECLAC, **Statistical Yearbook for Latin America and the Caribbean** (several issues); United Nations, **Monthly Bulletin of Statistics** (several issues).

In addition to the expected opposition to SAP policies from popular sectors and the middle classes, interest groups from dominant classes frequently resisted adjustment policies, when their specific interests were threatened. As a result, policies such as reduction of state subsidies and import duties became highly conflictive, and were implemented slowly and painfully.

Opposition to structural adjustment from popular sectors and left wing organizations included several national strikes from organized labour, bus and truck driver strikes, frequent riots organized by students and informal workers, an incipient urban guerrilla activity in the mid 1980s, and the emergence of a powerful indigenous movement that paralyzed the country for one week in 1990. Government repression was violent, particularly during the conservative Febres Cordero administration (1984-1988), when human rights violations, including torture, assassinations and illegal detentions became frequent. As influential groups from dominant classes and right wing political parties were also involved in opposition to particular adjustment policies, conflicts between the executive and the parliament were frequent. During the Febres Cordero regime, the government response included the use of tear gas inside the congress chamber, and a military blockade of the Supreme Court. Other political events, like the kidnaping of the president by a group of paratroopers in 1987, are illustrative of the underlying chronic political conflict that prevailed since 1982.

Thus SAP were applied in the midst of chronic social conflict. Additionally, they were implemented in a selective way. Only measures that did not confront strong opposition from influential groups among dominant classes were easily adopted. Among them, interest and exchange rate liberalization can be mentioned. These policies were received as either favourable or at least acceptable by agro-export elites. Conversely, reduction of protection for manufactures and domestic subsidies --particularly in oil derivatives and wheat-- generated strong resistance from industrialists and urban middle and subordinate classes. As a consequence, adjustment policies became notable for their lack of consistency, credibility and stability. The chaotic and spasmodic evolution of domestic oil-derivative prices is an illustrative example.

Despite its instability, SAP implementation speeded up and became more consistent from 1988 onwards, at least partially as a result of a more effective and stronger influence from international financial institutions, as Bargara Stalings suggests.[10] Among the most important events in SAP application, the following can be mentioned. Exchange rate liberalization was quickly adopted in the early 1980s. In 1982, the Christian Democratic president Oswaldo Hurtado devalued the currency for the first time in more than a decade and the conservative government of León Febres Cordero moved to a market controlled exchange rate in 1984. Interest rates were liberalized as well. Ever since, exchange rates have fluctuated according to market signals, with moderate Central Bank intervention. The anti-export bias that prevailed during the 1970s due to chronic overvaluation was eliminated or greatly reduced. Only from 1992 onwards, did anti-inflationary policies result in a new trend towards overvaluation. (Real effective exchange rate indices are presented in Table 4.)

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[10] Barbara Stallings, "International Influence on Economic Policy: Debt, Stabilization and Structural Reform", in: Stephan Haggard and Robert Kaufman, **The Politics of Economic Adjustment.** Princeton: Princeton University Press, 1992.

TABLE 4

REAL EFFECTIVE EXCHANGE RATE (REER) INDICES FOR EXPORTS: 1978-1994 (1990=100)

Year	Index
1978	47.4
1979-81	47.0
1982-85	54.8
1986	68.7
1987	78.8
1988	92.3
1989	94.6
1990	100.0
1991	95.2
1992	94.7
1993	83.9
1994	77.6

Note: REER indices are estimated as the average quotient of the real exchange rate (official principal) between the Ecuador's currency and the currencies of its main trading patterns weighted by the relative participation of each of these countries in Ecuador's exports.

Source: CEPAL, **Preliminary Overview of the Latin American and Caribbean Economy**, 1994.

Domestic price liberalization --particularly elimination of oil and food price subsidies-- was slowly adopted during the 1980s. Only from 1989 onwards oil subsidies were consistently reduced and eliminated.

The reduction of the state apparatus was also continuous during the 1980s (excepting a right-wing "populist experience" between 1986 and 1988) and speeded up in the early 1990s. Between 1982 and 1990, the share of public servants in the national labour force fell from 13.5% to 11.4%.[11]

Although import barriers were reduced since 1984, in 1998 tariffs were still high and disperse, fluctuating between 0 and 300%. Additionally, some import restrictions and prohibitions persisted. In 1990 the most important step towards trade liberalization was adopted. Import tariffs were reduced to a rank between 5 and 80% (with most products --except vehicles-- ranking between 5 and 30%) and most import restrictions and prohibitions were lifted. As a result, a dramatic expansion of

[11] According to the 1990 census, the sectoral composition of labour was: agriculture 32%, manufacturing 12%, construction 6%, commerce, transportation and services 43%, and others 7%.

consumer goods imports took place. As Table 5 shows, they increased by a factor of 4.9 between 1990 and 1994.[12] Since 1994, as the Andean Pact reemerged in the framework of "open regionalism",

TABLE 5

IMPORTS AND IMPORT TARIFFS: 1975-1994

Year	Total Imports (US$)	Consumer Goods Imports (US$)	Collected Import Tariffs/Imports (%)
1975	987.0	129.7	17.8
1976	958.3	107.5	18.9
1977	1188.5	142.7	22.2
1978	1505.1	203.8	17.2
1979	1599.7	208.1	17.0
1980	2253.3	243.1	15.8
1981	1920.6	200.3	15.0
1982	2424.6	274.9	12.7
1983	1474.6	183.3	14.7
1984	1630.0	180.3	14.8
1985	1766.7	152.5	15.9
1986	1810.2	169.6	16.2
1987	2158.1	208.4	10.5
1988	1713.5	164.6	11.9
1989	1854.8	184.4	10.8
1990	1861.7	178.6	11.6
1991	2398.6	254.8	6.0
1992	2430.4	397.2	6.2
1993	2562.2	585.0	n.a.
1994	3642.2	860.1	n.a.

Sources: De Janvry et al., **The Political Feasisibility of Adjustment in Ecuador and Venezuela;** Banco Central del Ecuador, **Cuentas Nacionales** (several issues); Banco Central del Ecuador, **Boletín Anuario** (several issues); Banco Central del Ecuador, **Información Estadística Mensual** (several issues).

Ecuador has participated in a free trade area with Colombia and Venezuela. As a consequence, intra-regional trade experienced a dramatic jump, as exports to the Andean region moved from 203.7 million US$ in 1991 to 385.6 in 1994, and import expansion was even higher.

[12] Tariffs were partially reduced during the Febres Cordero administration. However the 1987 import rise was mostly an effect of the oil pipeline and infrastructure reconstruction after the earthquake.

Labour deregulation was pursued continuously during the period, as minimum wages declined and labour legislation was reformed "to increase flexibility and eliminate rigidities unattractive to foreign investors."[13] (See Chart 4 for real minimum urban wages.)

The foreign debt was renegotiated in the framework of the Brady Plan in 1994. In spite of that, its amount --13.66 billion US$ in December 1994-- is still growing and remains higher than GDP. Ecuador's Debt/GDP ratio is one of the worst in Latin America.

Despite its advance, structural adjustment remains an uncompleted task, as macroeconomic imbalances persist. Privatization of public enterprises is still on the agenda. Inflation, albeit declining, remains at around 20% per year. As the exchange rate has been used as an anchor to reduce inflation during the last years, the domestic currency has become overvalued. Interest rates are high and a massive inflow of speculative short term foreign capital poses doubts about the future stability of economic policies, as Mexico's recent crisis has demonstrated. As income taxes remained in 1993 at only 1.2% of GDP, fiscal reforms have not been successful in strengthening public revenues. Moreover, debt service will require around 7% of GDP in the near future. Finally, the recent border conflict with Peru will increase fiscal problems and reduce private credibility.

ECUADOR'S ECONOMIC PERFORMANCE: 1982-1994

Broadly speaking, Ecuador's economic record from 1982 onwards is poor, in spite of a moderate recovery in the early 1990s. Only in 1992 did per capita income, in constant sucres, recover its pre-crisis level (1981). Measured in constant dollars, in 1994 it was still lower than the 1981 figure. Both total and foreign investment rates remain low and flat, and the average export purchasing power in the 1990-1994 period was only 2.8 % higher than the 1976-1981 average. Moreover, no significant export diversification has taken place. Although exports jumped by 21% in 1994 --the highest expansion since the oil boom years-- its growth cannot be necessarily regarded as a sign of a stable future export expansion.[14] Nevertheless, in spite of its weak performance, the country did not experience hyper inflation, a dramatic income decline, or violent social unrest, as in the cases of Peru, Bolivia and other countries in the region. Charts 2, 3-A and 3-B present detailed information on the evolution of the economy and exports.

Between 1983 and 1992, investment rates averaged 14.8% of GDP, down from a 21.5%

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[13] De Janvry et al., **The Political Feasibility of Adjustment in Ecuador and Venezuela**, p. 79.

[14] The export increase is partially explained by both a dramatic increase in coffee prices --a volatile event-- and the expansion of intra-regional exports to the recently open Andean Market. The latest can be regarded mostly as an static short term gain of free trade, and will probably follow a logistic trend and reach a ceiling level in the next years. Non traditional exports to developed countries performed well, but their current level is still low. In 1994, the three main non-traditional exports --flowers, textiles and wood products-- accounted for 1.5%, 1% and 0.5% of total exports.

mean for the 1965-1982 period.[15] There is no sign of investment recovery, as the trend remains stagnant or declining. Foreign investment, in particular, never reached 1% of GDP after its peak in the 1967-1975 period, when the petroleum-export sector was established. Based on this performance, it is difficult to forecast a stable economic recovery in the short term. Nevertheless, growth in per capita income was slightly positive between 1989 and 1992, with an average of 1.5% per year.

The adverse evolution of terms of trade has been a determinant factor in poor economic performance, particularly over the late 1980s, when oil, coffee and cacao prices plummeted, largely affecting export purchasing power. While export quantum grew at 6.3% per year between 1980 and 1993, terms of trade worsened by 36% in the same period.[16] Although this problem is common in Latin America, Ecuador is among the most affected cases.[17]

Exports. As export promotion and diversification is one of the most important goals of structural adjustment, an analysis of export performance is important. The time that has elapsed is long enough for an evaluation since exchange rate liberalization and other export promotion policies have been pursued for more than a decade. As can be observed in Charts 3-A and 3-B, despite the exceptional expansion of 1994, export record has been weak and unstable. In most products, an important volume expansion has been outweighed by declining prices.[18] As a consequence, the average export purchasing power for the 1988-1994 period was 2.5 lower than that figure for 1976-1981. In per capita terms, the drop was 27%.[19] Moreover, export purchasing power plummeted in 1986 when oil prices collapsed, and the subsequent recovery has been weak up to 1993. Its annual growth rate was only 2.6% between 1989 and 1993, only slightly higher than the population growth rate (2.1%). The large 1994 recovery is partially explained by soaring coffee prices, the expansion of intra regional trade, and increasing oil export volumes, which can not be sustained in the medium term.[20] Although a moderate export expansion is probable in the future, a sustained short term economic recovery based on solid export growth seems elusive.

From 1972 onwards, four groups of products have accounted for the bulk of Ecuadorean

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[15] During the oil boom period, private investment was not only restricted to petroleum activities, but covered also manufacturing and finances. Public investment was also high, particularly in infrastructure.

[16] Oil accounts for a significant share in export quantum growth.

[17] Latin American terms of trade deteriorated by 33% between 1980 and 1993. See ECLAC, **Statistical Yearbook for Latin America and the Caribbean**, 1994.

[18] Oil is an illustrative example. Oil exports strongly expanded in the early 1980s, but the price drop in 1986 outstripped the growth. See Chart 3-A.

[19] Export purchasing power was calculated by deflating current exports by the U.N. price index of manufactures exported by developed countries. See United Nations, **Monthly Bulletin of Statistics** (several issues).

[20] Proven oil reserves will allow for about twelve more years of exports, with declining volumes and quality, and higher extraction costs. Heavy oil prevails in unexploited reserves. See World Bank, **Ecuador -Country Economic Memorandum** (1988).

exports. They are: crude oil and its derivatives; bananas; coffee and cacao beans and their elaborates; and fishery products (mostly shrimp). To evaluate exports, I did a comparative analysis of export performance between the 1970-1982 and the 1982-1994 periods, using a time series intervention analysis of the of export purchasing power for total exports and the main products. 1982 was chosen as a turning point between the oil boom and the crisis periods, given the significant change in long term trends in per capita GDP and import capacity.[21] Comparing the 1970-1981 and 1982-1992 periods with kinked exponential trend models, per capita GDP growth rates went down from 5.3% to -0.5% between the two periods, and import capacity did so from 9.7%to -4.9%.[22] During the 1970-82 period Ecuador followed ISI policies and then moved towards an export promotion strategy after 1982. To identify the effects of changes, I included two variables: a dummy variable for the 1982-1993 period, to capture a realignment of the export levels, and an interaction variable, to capture the change in the export growth rate during the post-1982 period.[23] In this way the effects of the post-1982 period are decomposed into: (i) an initial one-step change, and (ii) a variation in the growth rate. The results are summarized in Table 6.

Only for banana exports was the growth rate higher after 1982 than for the first period (judged by statistical significance). In the case of non-traditional products (other exports in the table) the change was positive, but not statistically significant. Changes in growth rates were negative, and in most cases significantly, for all the remaining cases. According to a similar model presented by the author in a previous research, which included the evolution of export quantum up to 1991, a positive and statistically significant difference in export volumes was found for total exports, oil and bananas.[24] Therefore, Ecuador's export performance can be depicted by an important, albeit unsuccessful, volume expansion.

The large expansion in banana exports during the late 1980s, and the more recent decline, are mostly the effects of changes in international demand: a shift of consumer preferences from processed to fresh fruits in the first case and the protectionist policy applied for the European Union in the second. Ecuador's participation in banana markets did not change significantly.

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[21] Import capacity, defined as the total purchasing power to import, was obtained by adding net capital and service flows to values of current exports, and deflating the total by the UN index of prices of manufactures exported by developed countries.

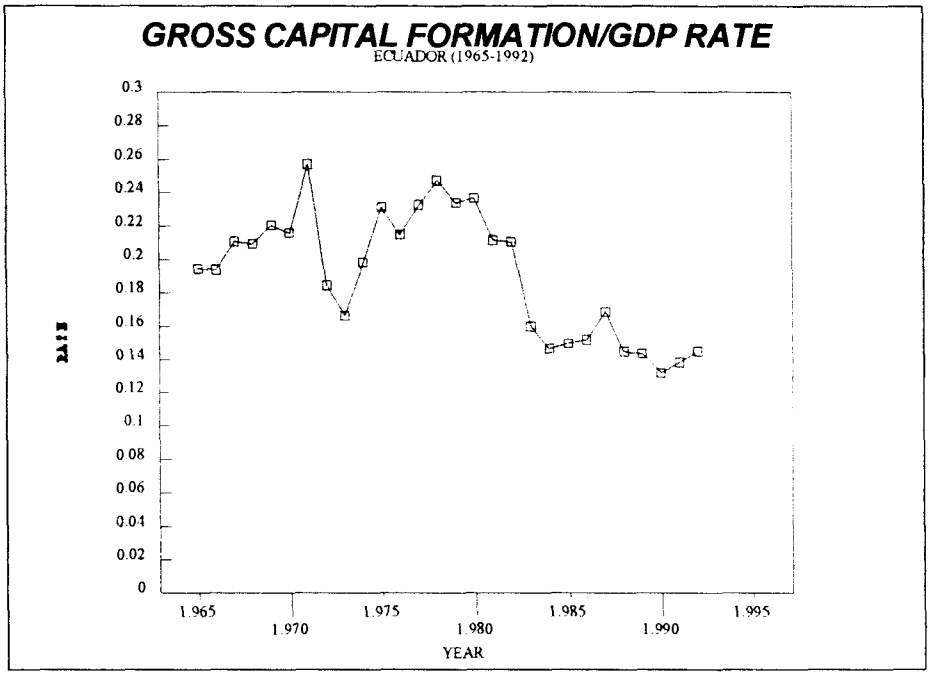
[22] Correlation coefficients were 0.96 for per capita GDP (measured in constant sucres) and 0.83 for import capacity. See Tables 2 and 3 for data. See, as a reference for kinked exponential models: James Boyce,"Kinked Exponential Models for Growth Rate Estimation", **Oxford Bulletin of Economics and Statistics**, Vol. 48, No. 4, November 1986.

[23] The interaction variable equals 0 for the 1970-1981 period, and 1 for 1982, and then, increases 1 unit for each subsequent year of the post-1982 period.

[24] See Larrea, "The Mirage of Development: Oil, Employment and Poverty in Ecuador (1972-1990)."

CHART 2

ECUADOR'S BASIC ECONOMIC INDICATORS



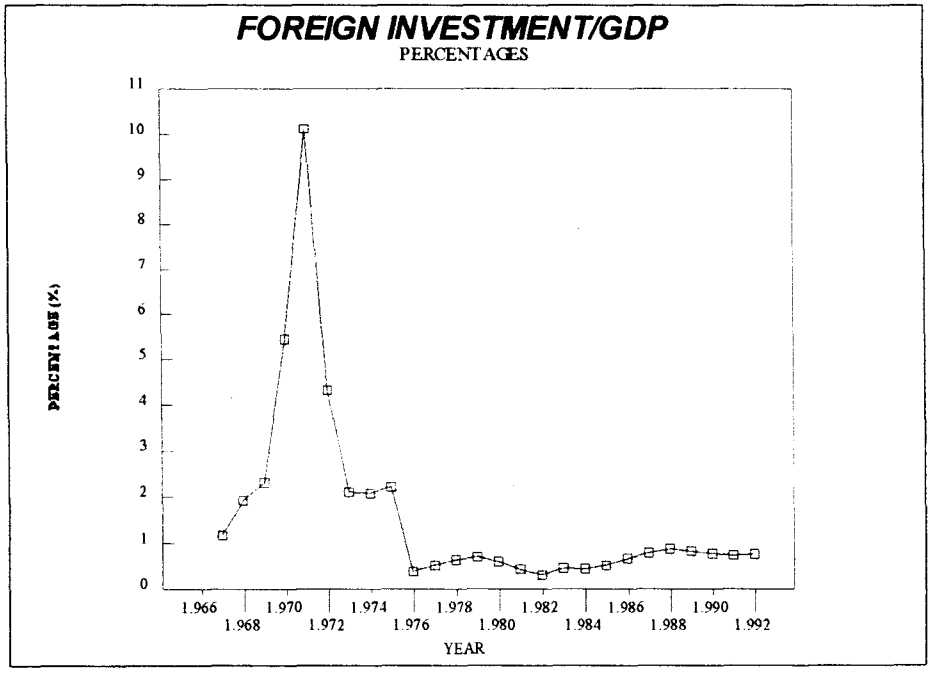
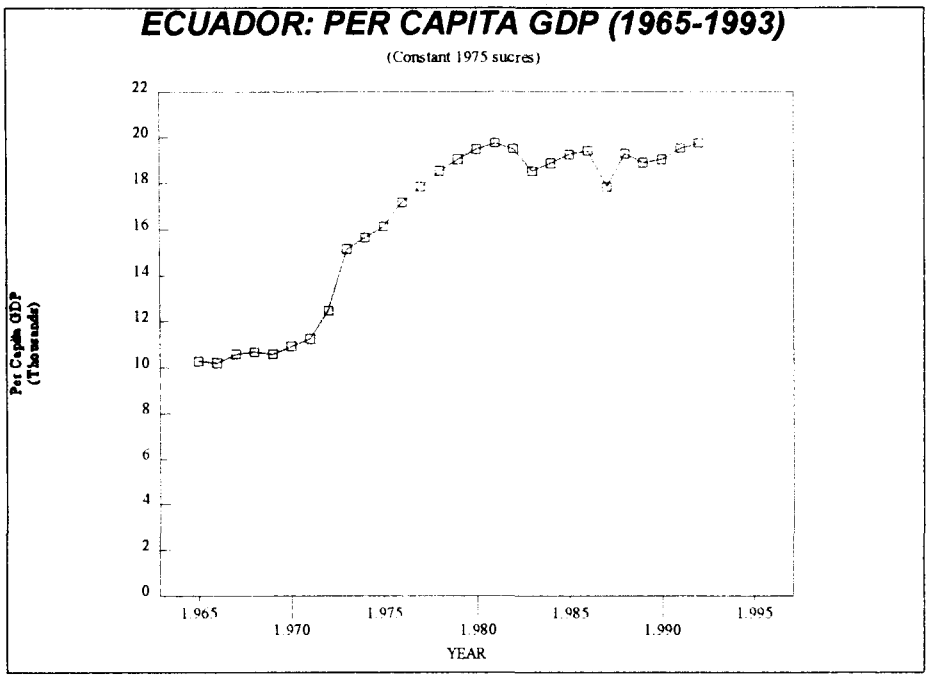
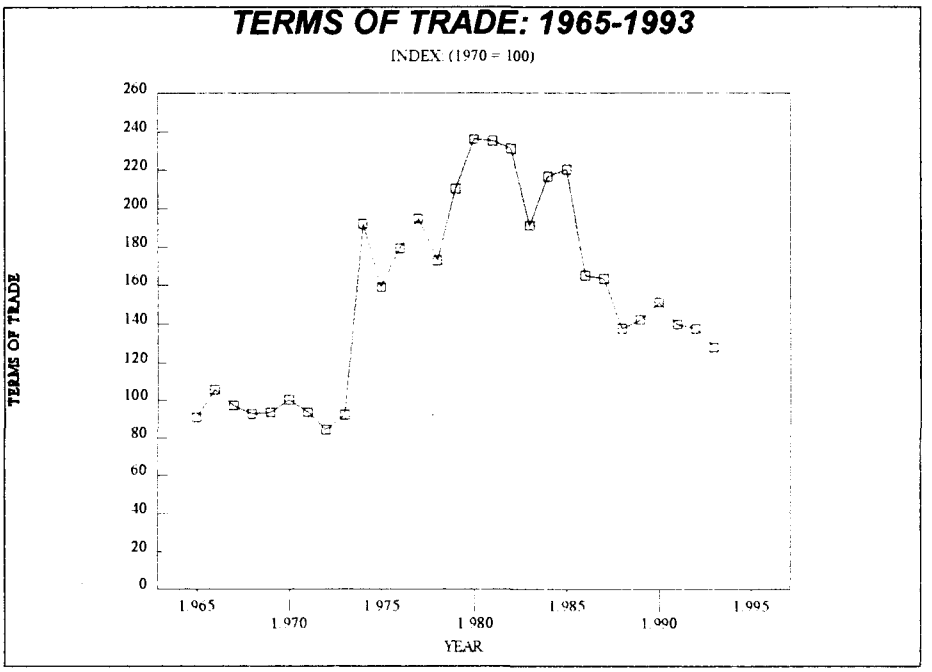


CHART 2 (CONTINUATION)

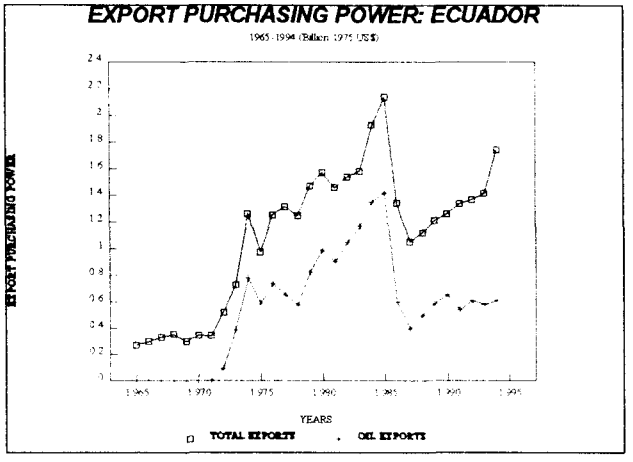


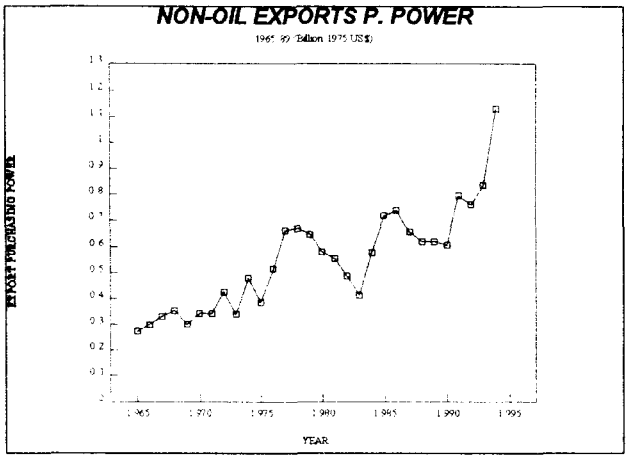


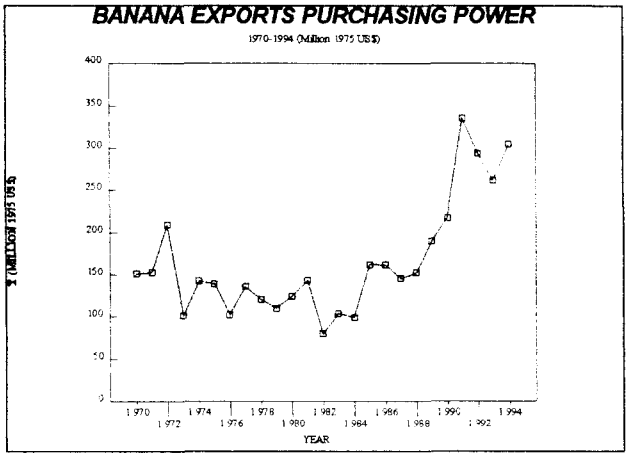
Sources: Banco Central del Ecuador, **Cuentas Nacionales** (several issues); Banco Central del Ecuador, **Boletín Anuario** (several issues); ECLAC, **Statistical Yearbook for Latin America and the Caribbean,** 1993.

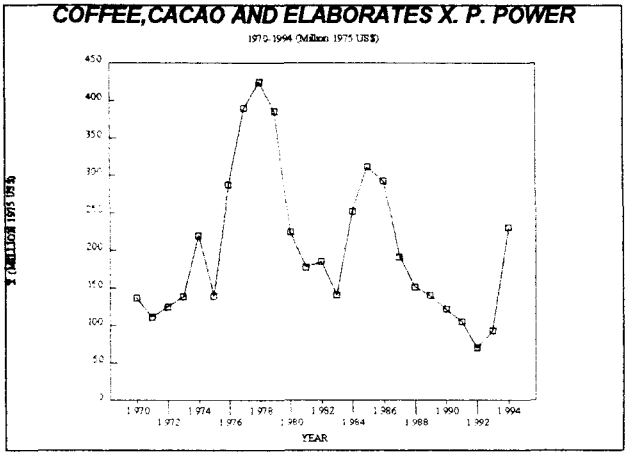
CHART 3-A

MAIN ECUADOREAN EXPORTS: 1965-1994







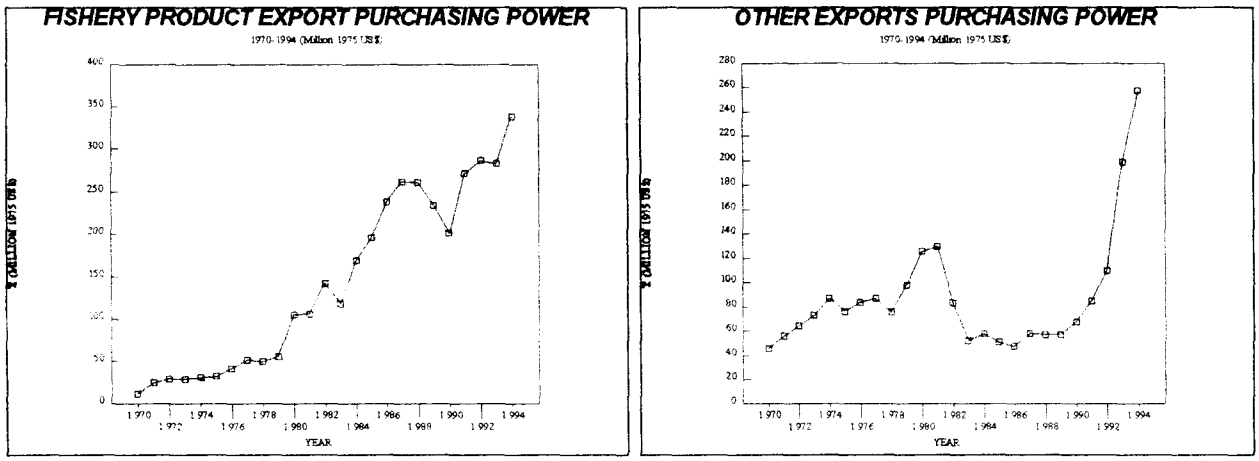


Note: Export purchasing power was calculated by deflating current exports by the United Nations price index of exports of manufactures from developed countries.

Sources: Banco Central del Ecuador, **Cuentas Nacionales** (several issues); Banco Central del Ecuador, **Boletín Anuario** (several issues).

CHART 3 -B

MAIN ECUADOREAN EXPORTS: 1965-1994 (CONTINUATION)



Note: Export purchasing power was calculated by deflating current exports by the United Nations price index of exports of manufactures from developed countries.

Sources: Banco Central del Ecuador, **Cuentas Nacionales** (several issues); Banco Central del Ecuador, **Boletín Anuario** (several issues).

Export diversification has also been weak. The most important non-traditional product exported to developed countries is fresh flowers, at US$ 54 million in 1994. Despite their rapid growth, flowers accounted for only 1.47% of total exports in that year. Moreover, Ecuador's exports are still overwhelmingly composed of primary or slightly elaborated products. According to ECLAC, 93% of Ecuadorean exports in 1993 were primary products. The recent opening of the Andean market produced an important growth in intra-regional exports, including manufactures. However, after the achievement of static gains from free trade, further growth will probably decline.

To summarize, Ecuador's export earnings have been dramatically affected by declining terms of trade since 1982. In spite of quantum expansion, purchasing power remains low. Excepting 1994, growth rates have been scarcely higher than those of the population. Export diversification also has been weak. So far, structural adjustment and export promotion policies have been unable to reactivate exports and resume strong economic growth. The remarkable 1994 expansion does not seem to be the beginning of a new export boom, although a moderate growth is feasible in the future.

TABLE 6

COMPARATIVE PERFORMANCE OF ECUADOREAN EXPORTS 1970-1982 AND 1982-1994 PERIODS (RESULTS OF INTERVENTION ANALYSIS)

Product or Group	Growth Rate 1970-1981 [1] (Annual %)	Post 1982 Relative Realignment (%)	Significance	Growth Rate 1982-1993 (Annual %)	Growth Rate Change Sign	Significance [2]
Total Exports	10.7	-6.9	No	-1.2	-	Yes
Oil and Derivatives	20.9	-1.3	No	-7.0	-	Yes
Non-oil Exports	6.1	-29.6	Yes	5.4	-	No
Bananas	-2.5	-28.8	Yes	11.5	+	Yes
Coffee, Cacao and Elaborates	7.7	-18.6	No	-5.3	-	Yes
Fishery Products	18.6	37.3	No	7.1	-	Yes
Other Exports	6.3	-57.8	Yes	10.0	+	No

Sources: Banco Central del Ecuador, **Boletín Anuario** (several issues); United Nations, **Monthly Bulletin of Statistics** (several issues).
Notes: Growth rates are estimated from exponential regressions, corrected for first-order autocorrelation.

(1) For total exports and oil and derivatives, the period is 1972-1981.
(2) Statistical significance is tested at the 5% level.

SOCIAL EFFECTS OF THE CRISIS AND STRUCTURAL ADJUSTMENT

Available information --albeit incomplete and not completely reliable-- suggests that social conditions in Ecuador worsened during the post-1982 period. Income distribution became more concentrated, urban poverty increased, underemployment and unemployment went up, real wages

declined and public social services deteriorated. Although some recovery is evident in the last few years, its future strength and sustainability are still unclear. Labour market conditions changed as well, as educational returns declined for low educational levels, and wage dispersion increased, both among and within groups with the same education, experience and gender, and in the same sector[25]. Social transformations are analyzed below, with emphasis on the urban sector during the 1987-1993 period, for which a detailed household survey information is available.

I will begin by summarizing relevant information available for the 1982-1993 period as a whole, or most of it. Table 7 contains figures on state expenditure, relative to GDP. Between 1982 and 1992, the share of public expenditure in GDP dropped by almost a half. Public consumption and social services (education and health) have been particularly hard hit. The reduction of the public bureaucracy is still under way and speeded up after 1992. The reduction of public expenditure, however, was not homogeneous. During the Febres Cordero conservative administration (1984-1988) cuts affected mostly social services, while the rest of public expenditure was not severely affected. By contrast, the social democratic regime of Borja (1988-1992) reduced mostly public investment and other components of public expenditure, without affecting social services in the same way.

In a context of educational budget cuts and shrinking family incomes, gross enrolment rates in secondary and tertiary education declined or leveled off, reversing their long term expansion, and the remarkable improvement during the oil boom period (see Table 8).[26] Surprisingly, the average education of urban wage earners remained roughly constant between 1987-1988 and 1993.[27] Since the quality of education seems to be declining as well, human capital formation has been seriously prejudiced, affecting long term prospects for economic recovery.

Wage policies, mostly wage repression and labour market deregulation, resulted in a strong decline in real minimum wages, as Chart 4 shows. Labour costs in constant dollars followed a similar path[28]. Although information on average wages is only partially available,. the evolution of functional income distribution shows a strong decline in the share of wages in value added (Chart 4), from about 30% during the 1970s to less than 15% in the early 1990s.

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[25] Four labour market sectors are differentiated: modern, informal, agricultural, and domestic services. Additionally, the private-public sector dichotomy was included.

[26] The unusual expansion of tertiary enrolment in the 1970s was a result of both the elimination of admission exams in public universities since 1969, and a strong support to higher education during the oil boom. Nevertheless, the 1980 figure for tertiary education in Table 8 may be slightly overestimated, due to possible over reporting of students form universities for budgetary reasons.

[27] The mean of years of formal education among urban wage earners is 9.8 for the whole urban sector, and 10.2 for Quito and Guayaquil, the two largest cities.

[28] Although measurement in constant dollars is not a relevant estimation of real wages, given the changes in real effective exchange rates and terms of trade, it provides an indicator of international competitiveness, as the country exports labour intensive products.

The evolution of total wages and business income, broken down by main economic sectors, provides a closer look at social income distribution (See Tables 9-A and 9-B). The information analyzed here updates and summarizes the analysis from De Janvry et al.[29] Between 1982 and 1992, the total wage bill declined by 43.4% in real terms. The reduction was less severe in agriculture (24.6%), and affected mostly manufacturing labour, which lost 60.9% of its value. Losses among public servants (33.6%) and other urban workers (46.1%) were in between. As unions are concentrated in manufacturing, the information suggests that organized labour was the most affected social group.

TABLE 7

PUBLIC SECTOR CONSUMPTION, INVESTMENT AND EXPENDITURE: 1980-1993
(Percentages of GDP at current prices)

YEAR	PUBLIC CONSUMPTION	PUBLIC INVESTMENT	TOTAL PUBLIC EXPENDITURE	EXPENDITURE IN: EDUCATION	HEALTH	OTHER
1980	14.5	6.4	20.9	5.3	1.8	13.8
1981	14.3	7.3	21.6			
1982	14.0	6.5	20.5	5.1	2.2	13.2
1983	12.5	4.8	17.3			
1984	12.3	4.4	16.6			
1985	11.5	4.9	16.3	3.7	1.1	11.5
1986	12.1	6.0	18.0	4.0	1.1	12.9
1987	12.8	6.4	19.3	3.9	1.4	14.0
1988	11.5	5.5	16.9	3.3	1.3	12.3
1989	9.4	4.6	14.0	3.0	1.2	9.8
1990	8.6	4.0	12.6	2.7	1.2	8.7
1991	7.7	3.9	11.5	2.9	0.9	7.7
1992	7.2	3.9	11.0	3.1	1.0	6.9
1993				2.7	0.7	

Sources: ECLAC, **Statistical Yearbook for Latin America and the Caribbean** (1993); Banco Central del Ecuador, **Cuentas Nacionales** (several issues); Banco Central del Ecuador, **Información Estadística Mensual** (several issues).

During the 1982-1992 decade, a substantial income transfer from labour to capital took place. Among capitalist classes, landowners (and farmers) were particularly benefitted during the 1982-1986 period, when a strong devaluation took place, favoring agricultural and fishing exports. Real business income from agricultural and fishing went up by 46.5% in four years. The close links

[29] See De Janvry et al., **The Political Feasibility of Adjustment in Ecuador and Venezuela**.

between the president Febres Cordero and the nation's agro-export elites partly explain this result. From 1988 to 1992, when the social democrat Rodrigo Borja took office, income transfers primarily benefited the manufacturing elites, which increased their income at 7.6% per year, mostly at a cost of labour.

TABLE 8

GROSS ENROLMENT RATES BY EDUCATION LEVEL: 1970-1990 (PERCENTAGES)

Year	1970	1975	1980	1982	1985	1986	1987	1988	1989	1990
Secondary	26.2	40.2	52.9	53.5	57.1	57.4	56.0	56.2	53.4	55.7
Tertiary	8.1	27.1	37.2				29.4	26.4	20.7	21.1

Note: The 1980 figure for tertiary education may be slightly overestimated, given a possible over reporting of enrolment from universities for budgetary reasons.

Source: ECLAC, **Statistical Yearbook for Latin America and the Caribbean** (1993).

In a context of slow economic growth and falling wages, important changes took place in the labour force structure.[30] The two most important transformations were: first, a large reduction in the percentage of wage earners, which took place in both the urban and rural sectors. According to census information, between 1982 and 1990, the figure declined from 65.7% to 55.7% in the urban sector, and from 38.5% to 33.7% in the countryside. At the national level, the decline was from 52.6% to 45.9%. This change suggests an expansion of the relative importance of both the urban informal sector and peasant subsistence economies. As large labour surplus exists in both sectors, structural unemployment grew. It must be added that Ecuador has been one of the countries with highest underemployment rates in Latin America. According to PREALC, underemployment affected 62% of labour force in 1980.[31]

The second transformation is a strong increase in participation rates, particularly among females. Global participation rates went up from 45.3% to 50.7% for the total population, and from

[30] See for a detailed analysis, Larrea, "The Mirage of Development: Oil, Employment and Poverty in Ecuador (1972-1990)."

[31] PREALC identifies as a "proxy" underemployed workers "with those employed in the traditional rural sector and the urban informal sector". See PREALC, **Beyond the Crisis** (Santiago: ILO, 1985).

18.3% to 26.3% among women.[32] The information suggests that the expansion was a subsistence strategy of poor families in the face of shrinking incomes.[33] This behavior follows a backward-bending labour supply curve, as Rocha found in Brazil.[34]

Although information on rural social conditions is scarce and fragmentary, national accounts data suggests a decline in the total agricultural wage bill (see Tables 9-A and 9-B). A 1994 survey carried out by IICA in several regions of the country discloses two dominant trends in rural wage employment: first, a reduction in the percentages of wage earners (with the only exception of new areas of flower production), and second, a move from permanent to temporary employment.[35] Additionally, the crisis in the construction industry reduces employment alternatives for rural seasonal and permanent migration to the cities.[36]

In spite of the crisis, not all social indicators deteriorated. Infant mortality rates declined, as they did in all LAC countries. Social diffusion of technical progress in medical care, as well as better educational levels, seem to play a role in a general trend towards better health conditions, even under harsh social and economic situations. According to census data, between 1982 and 1990, illiteracy rates declined and the average educational level of the adult population increased by about one year. Housing conditions improved as well. These changes were probably a lagged effect of the social investment in education and health accomplished during the oil boom period.

Recent Trends in Urban Income Distribution and Labour Conditions. Recent trends in urban social structure can be analyzed in detail, thanks to a series of urban household surveys available since 1987.[37] Before analyzing the information, a comment on its reliability is necessary. Although household surveys are the most important empirical source on recent social trends in Ecuador, they have some problems.

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[32] The global participation rate is defined as the ratio of EAP to population of work age.

[33] In addition, there is a long term trend to increase female participation in the labour force.

[34] See Cecilia Rocha, "The Market for Unskilled Labour in Brazil" (Ph.D. Dissertation. York University, 1987).

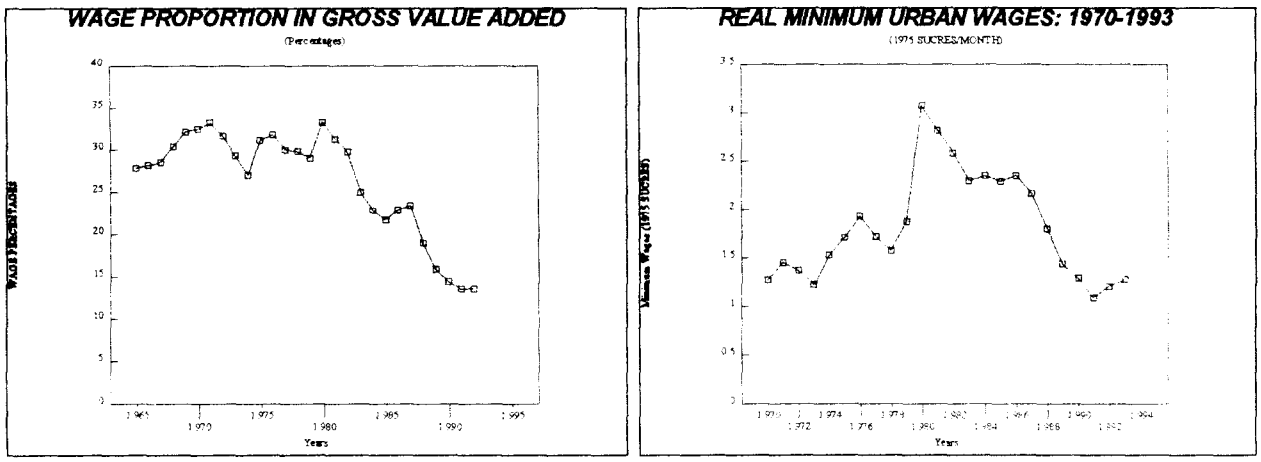
[35] IICA stands for Instituto Interamericano de Cooperación Agropecuaria. See IICA-PRONADER, Encuesta de Base en 12 Areas de Desarrollo Rural (unpublished data base, 1994).

[36] Construction output declined from 4.7% of GDP in 1982 to 2.8% in 1991 (percentages are estimated from data in constant 1975 sucres). See also: Simon Commander and Peter Peek, "Oil Exports, Agrarian Change and the Rural Labor Process: The Ecuadorian Sierra in the 1970s," **World Development**, Vol.14, No. 1, 1986.

[37] Annual employment and income surveys are available since 1988 for the urban sector, and since 1987 for the three largest cities (Quito, Guayaquil and Cuenca). Since 1993, surveys are taken twice a year.

CHART 4

WAGE PARTICIPATION IN VALUE ADDED AND MINIMUM WAGES: 1965-1993



Sources: Banco Central del Ecuador, **Cuentas Nacionales** (several issues); Banco Central del Ecuador, **Boletín Anuario** (several issues); INEM, unpublished information; IDB, **Economic and Social Progress in Latin America** (1994).

A common problem in household surveys is income under-reporting.[38] To estimate it, I compared total urban income with national accounts --excluding agriculture and petroleum-- differentiating labour and non-labour income. Wage under-reporting was relatively small, with an average of 5%. Conversely, non-labour income was under reported by 80%. In other words, only one fifth of non-labour income was reported. Under reporting coefficients remained roughly constant for the 1988-1993 period. As capital income is the largest component of GDP, the total under-reporting factor is 65%. These figures cast serious doubt on the reliability of the information. While wages seem to be well reported, capital income is mostly undetected. By adjusting capital incomes to equal the national accounts figure, a better estimation can be obtained, although evidently still open to possibly serious bias because any assumption about how much to adjust each family's capital income is arbitrary. Moreover, an estimation of urban income from published national accounts information is also affected by a wide error margin.[39]

[38] Analyzing the 1975 survey in Ecuador, Berry found a serious under reporting of capital income. Albert Berry, "Employment and the role of Intermediate Cities in Ecuador during the Coming Years" (Quito: USAID, unpublished paper, 1984).

[39] Total urban income in the household survey was adjusted to non-primary GDP. As agriculture output does not correspond to rural output, an estimation error exists.

The second problem is posed by frequent changes in the questionnaire. Income questions changed twice, in 1991 and 1992. The use of three different questionnaires seriously affects diachronic comparability. The 1991 survey in particular seems to be the less reliable in the series. Other changes in the sampling procedure and the institutional context seem less harmful. In conclusion, reporting and non-sampling flaws create systematic biases and other errors in the information, reducing data comparability and reliability; Adjustments can only partially compensate for those problems.

Taking these problems into account, and trying to correct them when possible, five themes will be discussed: income distribution, poverty, labour force composition, wages, and returns to education.

Income Distribution. Data on income distribution are presented in Tables 10 and 11. An increase in income concentration can be observed, both among income earners and households. The increase seems to be triggered around 1990, at the time of import liberalization. The Gini coefficient among earners went up from an average of 0.431 in 1988-1990 to an average of 0.483 in 1992-1993.[40] (Unfortunately, 1991 data are not reliable, due to the application of an oversimplified income questionnaire in that year, and there are changes in the questionnaire between the two intervals.) Household income distribution follows a similar, albeit smoother, ascending path. Concentration among households is, as expected, lower than that among earners.

Given severe under-reporting, Gini coefficients calculated from reported income probably underestimate real figures. However, as relative under reporting factors remain roughly unchanged over time, the information bias is constant and the observed 5 percentage point increase in Gini coefficients can be regarded as an objective indicator of a significant process of income concentration.[41] Moreover, as concentration is consistently shown in all the coefficients for specific

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[40] Gini coefficients were directly calculated from individual observations. Both persons and households with zero income were excluded. Gini coefficients were estimated ranking earners by personal income and households by household income. Questionnaires report monthly income, referred to the last month before the survey. For the 1989 and 1990 surveys, missing values for non -waged income received in kind by employers and self-employed persons were estimated by a multiple regression. All other cases with missing values were excluded from the calculations for Gini coefficients among earners. In the case of households, only cases with missing family income were excluded, and individual missing values were not added to family income. Generally, the percentage of missing income in the surveys is below 2% , excepting the case of non-waged in-kind income in 1989 and 1990, where a regression estimation was used.

[41] Reporting rates, defined as the ratio of total survey income to the correspondent national accounts figure, are the following:

Year	Wage	Other Income	Total Income
1988	0.833	0.186	0.340
1989	0.963	0.229	0.375
1990	1.026	0.213	0.362
1991	1.266	0.200	0.377
1992	0.983	0.184	0.316

groups, and samples are very large, observed income concentration in the urban sector cannot be attributed solely as a result of statistical flaws, changing questionnaires or aleatory errors.[42]

To estimate and correct the bias, reported income has been adjusted to national accounts, using specific correction factors for wage and non-wage income each year. The resulting Gini coefficients present an increment from 0.61 to 0.66 between the two intervals. Although the real value of Gini coefficients is difficult to determine, corrected figures are likely more representative.

Comparison between the 1988-1993 period and previous years is difficult because of different samples, questionnaires and methods in household surveys. Only two previous estimates from urban household surveys exist, and uncorrected Gini coefficients for the employed population were 0.507 in 1968 and 0.454 in 1975. From this information and other sources can be hypothetically inferred, therefore, that urban income distribution was very high before the oil boom, went down during the 1970s --mostly as a result of a large expansion of middle classes during the boom-- and became more concentrated again during the crisis, which particularly affected middle classes and popular sectors.[43] National accounts figures also suggest that income concentration increased from 1983 onwards. The largest change, however, took place after 1990. Two important factors probably played a role in the recent process. Trade liberalization, on the one hand, may have adversely affected small scale production, given the dramatic expansion of consumer good imports, and also may have induced technological change. On the other hand, the reduction of public employment, which has accelerated after 1991, strongly affected the middle classes. The combined effect of those changes was an increase in open unemployment rates, which rose from 6.1% in 1989 to 8.9% in 1991, and an expansion of the informal sector, which increased from 39.4% to 41.3% of EAP between the cited years (see Table 15). Further research is necessary to analyze the causal links between economic policies, labour composition and income distribution.

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[42] Household surveys typically include about 9000 families, or 42000 persons. After selecting income earners and adjusting for the effect of differential relative weights, the equivalent sample size fluctuates about 6000. Although the questionnaire applied from 1988 to 1990 is different to the used in 1992 and 1993, the information shows internal consistency for all the variables presented in this essay and is also comparable with national accounts, as note 41 shows.

[43] See Philip Musgrove, **Consumer Behavior in Latin America: Income and Spending of Families in Ten Andean Cities**, Washington: The Brookings Institution, 1978; Carlos Luzuriaga and Clarence Zuvekas, **Income Distribution and Poverty in Rural Ecuador, 1950-1979**, Temple: Arizona State University, 1983.

TABLE 9-A

SOCIAL INCOME DISTRIBUTION IN ECUADOR
(MILLIONS OF 1975 SUCRES)

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Wage Bill	37941	39172	47137	46336	44833	36564	34731	34300	36870	35604	31998	26807	24670	24397	25366
Agriculture And Fishing	2615	3127	3450	3147	2747	2099	1957	1868	2044	2216	2067	1872	1757	1815	2072
Manufacturing	5906	6492	7362	7169	6864	5345	4563	4163	4585	4297	3742	3172	2772	2740	2681
Public Sector	10718	10456	13382	13638	13020	11277	12221	12780	13814	13128	11923	9275	8554	7919	8647
Other Urban	18702	19097	22944	22382	22202	17843	15991	15490	16427	15963	14265	12487	11587	11923	11966
Total Urban	35326	36045	43687	43189	42086	34465	32774	32432	34826	33388	29930	24935	22914	22582	23294
Net Business Income	84171	90044	88217	92762	97111	101763	109386	110772	113140	105538	122977	125741	131782	142962	148430
Agriculture And Fishing	16932	15651	14229	14962	15952	17466	19219	19900	23376	22056	22973	22582	22460	25632	23700
Manufacturing	16575	17586	16334	17408	19074	20249	25155	24153	25404	23280	29926	30207	30983	35483	40223
Other Urban	50665	56807	57654	60391	62085	64048	65011	66719	64359	60202	70079	72953	78339	81846	84507
Total Urban	67240	74393	73988	77800	81160	84297	90167	90872	89763	83482	100005	103159	109321	117330	124730
Total Factor Income	122112	129216	135354	139098	141944	138327	144117	145073	150010	141142	154975	152548	156452	167359	173795

Note: All figures were deflated by the GDP deflator.
Source: Banco Central del Ecuador, **Cuentas Nacionales** (several issues).

TABLE 9-B

SOCIAL INCOME DISTRIBUTION IN ECUADOR
(INDEX: 1982=100)

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Wage Bill	84.6	87.4	105.1	103.4	100.0	81.6	77.5	76.5	82.2	79.4	71.4	59.8	55.0	54.4	56.6
Agriculture And Fishing	95.2	113.8	125.6	114.6	100.0	76.4	71.2	68.0	74.4	80.7	75.3	68.2	63.9	66.1	75.4
Manufacturing	86.1	94.6	107.3	104.5	100.0	77.9	66.5	60.6	66.8	62.6	54.5	46.2	40.4	39.9	39.1
Public Sector	82.3	80.3	102.8	104.7	100.0	86.6	93.9	98.2	106.1	100.8	91.6	71.2	65.7	60.8	66.4
Other Urban	84.2	86.0	103.3	100.8	100.0	80.4	72.0	69.8	74.0	71.9	64.3	56.2	52.2	53.7	53.9
Total Urban	83.9	85.6	103.8	102.6	100.0	81.9	77.9	77.1	82.8	79.3	71.1	59.2	54.4	53.7	55.3
Net Business Income	86.7	92.7	90.8	95.5	100.0	104.8	112.6	114.1	116.5	108.7	126.6	129.5	135.7	147.2	152.8
Agriculture And Fishing	106.1	98.1	89.2	93.8	100.0	109.5	120.5	124.8	146.5	138.3	144.0	141.6	140.8	160.7	148.6
Manufacturing	86.9	92.2	85.6	91.3	100.0	106.2	131.9	126.6	133.2	122.1	156.9	158.4	162.4	186.0	210.9
Other Urban	81.6	91.5	92.9	97.3	100.0	103.2	104.7	107.5	103.7	97.0	112.9	117.5	126.2	131.8	136.1
Total Urban	82.8	91.7	91.2	95.9	100.0	103.9	111.1	112.0	110.6	102.9	123.2	127.1	134.7	144.6	153.7
Total Factor Income	86.0	91.0	95.4	98.0	100.0	97.5	101.5	102.2	105.7	99.4	109.2	107.5	110.2	117.9	122.4

Source: Banco Central del Ecuador, **Cuentas Nacionales** (several issues).

To identify the particular evolution of different kinds of income, I calculated Gini coefficients for wage and non-wage income, and for formal and non-formal activities.[44] Concentration increased in all four groups, albeit in different degrees. The increment between the 1988-1990 and the 1992-1993 means is 3.3 percentage points for wages, 7.3 points for non-wage income, 9 points for the formal sector, and 4.6 points for non-formal activities. Data suggest that concentration took place mostly in business income. This change is consistent with a probable negative impact of trade liberalization on small-scale enterprises. However, wages became more concentrated as well. Additional empirical evidence suggests an increasing wage dispersion. Coefficients of variation of wages went up, and regression results (presented below) show that wage dispersion increased both among and within groups with similar education, experience, gender and sector. The change in non-formal income suggests that some informal activities are a non-regulated appendix of the modern sector. As Portes, Ong and others point out, new unregulated and flexible labour relations, such as subcontracting and small scale sweatshops, are increasingly adopted in both developed and underdeveloped countries.[45] In this context, technological change, and production shifts (e.g. from non tradable to tradable activities) may have important effects on the informal sector as well.

The evolution of real income for different strata, presented in Table 10, discloses a severe deterioration for the poorest half of the population, an unstable or slightly declining situation for the next 45%, and a well defined improvement for the richest 5%. In other words, real incomes deteriorated for subordinate and middle classes, while they increased for the highest echelons of the population. This evolution is consistent with national accounts information on social income distribution, presented in Tables 9-A and 9-B.

Poverty. Following ECLAC's definition of the poverty line, I estimated poverty and indigence percentages, for both households and population.[46] In addition, average per capita income was estimated in food-basket units for each group. Finally, I calculated a poverty gap index, defined as the fraction of poor population times the relative income gap (i.e. the relative difference between the

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[44] Non-formal activities include the informal sector, domestic service and agricultural workers. The informal sector is heuristically defined as a group composed by: first, self-employed workers, excluding professionals and technicians with university education; second, unremunerated family workers; and, third, persons working in establishments with less than 6 workers, excepting activities such as travel, air transport and exchange agencies, or computer centers. Unremunerated family workers were included in all calculations referred to the informal sectors, excepting Gini coeficients.

[45] See David Harvey, **The Condition of Postmodernity**, Cambridge: Blackwell, 1989; Oihwa Ong, "The Gender and Labor Politics of Postmodernity", **Annual Review of Anthropology** 20 (1991); Alejandro Portes and Richard Schauffler, "The Informal Economy in Latin America: Definition, Measurement, and Policies", PCID Working Paper Series N. 5 (Baltimore: Johns Hopkins University, 1992).

[46] A household is defined as poor when its income falls below the cost of a basic consumer basket. A household is regarded as indigent when its income is lower than the cost of a normative basic food basket. The cost of the basic consumer basket is defined as 1.88 times the cost of the basic food basket. Following previous studies of poverty in Ecuador, an Engel coefficient of 1.88 is used, instead of its general value of 2. For 1990 and the following years, the cost of the food basket was estimated from empirical data collected in 1989 and food consumer price indices. See Carlos Larrea, **Pobreza, Necesidades Básicas y Desempleo: Area Urbana del Ecuador** (Quito: ILDIS-INEM, 1990).

average income of the poor and the poverty line). The poverty gap index ranges between zero and one, and is somewhat simpler than Sen poverty index (See Table 12).

TABLE 10

URBAN INCOME DISTRIBUTION IN ECUADOR: 1988-1993
GINI COEFFICIENTS

Category	1988	1989	1990	1991	1992	Jul-93	Nov-93
Income earners	0.437	0.417	0.439	0.505	0.480	0.475	0.494
Households	0.408	0.389	0.420	0.480	0.453	0.451	0.469
Wages	0.377	0.373	0.409	0.433	0.394	0.399	0.423
Non-wage income	0.509	0.458	0.467	0.574	0.555	0.544	0.555
Formal Sector Income	0.536	0.565	0.597	0.65	0.645	0.643	0.686
Non-formal income	0.417	0.398	0.393	0.46	0.452	0.438	0.458
Income earners Corrected data[1]	0.605	0.605	0.618	0.685	0.660	0.655	0.670

AVERAGE PERSONAL INCOME BY MAIN STRATA
(1988 sucres/month)

	1988	1989	1990	1991	1992	Jul-93	Nov-93
Poorest 5 %	2345	2330	2006	1659	1753	1676	1814
Next 5 %	4010	3859	3458	3042	2791	2933	3155
Next 10 %	6998	5788	4876	4252	4057	4574	4693
Next 30 %	11689	10266	9107	7720	8027	9044	9149
Next 30 %	29341	29986	27851	20994	22308	24000	26461
Next 10 %	65479	71208	67334	56552	55532	57754	65503
Next 5 %	101906	103900	103266	91258	90876	98677	107818
Richest 5%	257148	222508	216769	301498	252507	272148	321875
(Richest 1 %)	595397	414289	430563	728683	622503	601282	748098
Average income	37827	36405	34583	34568	32456	34918	39436

Sources: INEM and INEC. Encuesta de Hogares (unpublished data base, several years).

(1) Personal income data were adjusted using correction factors to match total wages and total non-labour income with the corresponding components of non-primary GDP. Excluded primary activities were agriculture, silviculture, fishing, catering, logging, mining and petroleum extraction and refining. Correcting factors vary for different kinds of non-labour income.

TABLE 11

INCOME DISTRIBUTION BY DECILES
(Uncorrected Distribution among Earners)
(Percentages)

DECILE	1988	1989	1990	1991	1992	Jul-93	Nov-93
1	1.4	1.8	1.8	1.4	1.4	1.4	1.3
2	3.0	3.6	3.2	2.7	2.7	2.7	2.8
3	4.4	4.6	4.3	3.4	3.8	3.9	3.6
4	6.1	5.3	5.5	4.3	4.9	5.0	4.9
5	6.6	7.0	6.3	5.9	6.3	6.1	5.6
6	8.2	8.3	7.9	6.9	7.5	7.7	7.8
7	9.5	9.9	9.7	8.9	9.1	9.3	8.4
8	11.8	12.2	11.9	11.3	11.6	12.0	11.7
9	15.5	15.3	16.0	15.2	15.2	15.4	14.6
10	33.5	31.9	33.4	39.9	37.5	36.6	39.4
(Top 5 %)	22.9	21.6	22.3	28.4	26.4	25.4	28.5
(Top 1%)	8.9	7.7	8.4	12.5	11.9	10.6	12.4

INCOME DISTRIBUTION BY DECILES
(Distribution among Earners Corrected by National Accounts)
(Percentages)

DECILE	1988	1989	1990	1991	1992	Jul-93	Nov-93
1	0.8	0.9	0.8	0.7	0.7	0.7	0.6
2	1.9	1.6	1.4	1.2	1.3	1.3	1.2
3	2.3	2.0	2.0	1.6	1.8	1.9	1.8
4	3.1	2.8	2.5	2.2	2.4	2.5	2.3
5	3.9	3.7	3.4	2.9	3.2	3.4	2.9
6	5.0	5.0	4.9	4.0	4.3	4.3	4.1
7	7.1	7.4	7.4	5.4	6.2	6.3	6.2
8	11.2	12.3	11.9	8.8	10.1	10.0	9.8
9	17.3	19.6	19.5	16.4	17.1	16.5	16.6
10	47.5	44.8	46.3	56.8	52.9	53.1	54.5
(Top 5 %)	34.0	30.6	31.3	43.6	38.9	39.0	40.8
(Top 1%)	15.7	11.4	12.5	21.1	19.2	17.2	19.0

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

TABLE 12

URBAN POVERTY IN ECUADOR: 1988-1993

Year	1988	1989	1990	1991	1992	Jun-1993	Nov-1993
			Population Percentages				
Non-poor	33.7	29.3	24.7	26.7	26.2	26.5	31.9
Poor non-indigent	31.9	34.6	31.0	28.0	29.1	28.8	27.7
Indigent	34.4	36.1	44.3	45.3	44.7	44.7	40.4
All poor (PP)	66.3	70.7	75.3	73.3	73.8	73.5	68.1
			Household Percentages				
Non-poor	40.0	35.9	30.9	31.6	31.9	35.8	41.3
Poor non-indigent	30.6	33.5	30.9	27.9	28.3	27.7	25.7
Indigent	29.4	30.6	38.1	40.5	39.8	36.4	33.0
All poor	60.0	64.1	69.1	68.4	68.1	64.2	58.7
Per Capita Income (basic consumer baskets)	1.223	0.942	0.855	0.936	0.904	0.936	1.090
Non-poor	2.244	1.934	1.986	2.203	2.128	2.217	2.398
Poor non-indigent	0.746	0.736	0.732	0.734	0.725	0.732	0.739
Indigent	0.328	0.335	0.309	0.317	0.303	0.307	0.293
All poor (PY)	0.529	0.531	0.483	0.476	0.469	0.473	0.474
Poverty Gap Index (PI)[1]	0.312	0.331	0.389	0.384	0.392	0.387	0.358

Notes: (1) PI = PP (1-PY) / 100

Sources: INEM and INEC. Encuesta de Hogares (unpublished data base. several years).

Poverty percentages are likely overestimated, as a result of income under reporting. Corrected figures can be estimated to provide a more accurate view. In spite of the systematic bias, general trend can be observed. Poverty increased between 1888 and 1992 and began to decline in 1993. As about two thirds of the population are affected, the incidence of urban poverty is stunning and much

higher than the regional average.

The poverty trend follows the counter-cyclical behavior observed in other Latin American countries by Morley, increasing during recessions and declining as growth is resumed.[47] In Ecuador, however, as income concentration did not decline, growth is still weak, and since an entirely new socio-economic context with weaker trickle down effects is being set up, poverty will likely remain at high levels in the near future.

Wages. Wage trends are analyzed for the total urban sector, and for the two largest cities. Guayaquil and Quito are interesting no only because modern manufacturing and finances, and public sector employment are concentrated there, but also because the series for the two cities begins in 1987, including one more year. Figures are presented in Tables 13 and 14.

Average real wages plummeted from 1987-88 to 1992. The loss was 22% for the total urban sector between 1988 and 1992 and 32% for the two metropolitan centers in the 1987-1992 period. In 1993 a partial recovery took place, reducing the net loss by about a half. Unfortunately, 1994 data are not yet available to find whether this wage recovery continued. Survey data corroborate general wage trends from national accounts, presented in Tables 9-A and 9-B.

Total wage dispersion does not have a consistent trend. Nevertheless, the coefficient of variation jumps in the last survey, suggesting that recovery and increased heterogeneity are interlinked. Information from 1994 will also be important on this point. The increase of dispersion is concentrated in the formal sector of Guayaquil and Quito. It suggests the emergence of new highly profitable activities in the modern sector. They may be linked to finance, new technology (data processing, communications, biotechnology) or even narcotic smuggling. Further research is necessary to identify dynamic branches.

Wage differentials between the formal and informal sectors are large and stable, suggesting a segmented labour market structure. Gender differences are also strong and consistent. As regression results --presented below-- show, significant gender discrimination exists in the labour market, as female wages are 23 % lower than male wages at equivalent levels of education, experience, and sectoral insertion. Labour market segmentation is also apparent form regression results, as informal activities have both lower wages at similar education and experience levels, and lower returns to education. Public servants were more affected by declining wages. For them, the drop was larger and the recovery smaller.

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[47] See Samuel Morley, "Poverty and Distribution in Latin America: Evidence from the Past, Prospects for the Future"(paper prepared for the Seminar "El Impacto del Ajuste Estructural en los Mercados de Trabajo y en la Distribución del Ingreso en America Latina", University of Toronto and Universidad Nacional de Costa Rica, San José de Costa Rica, Septiembre de 1994.

TABLE 13

REAL WAGES AND AVERAGE INCOME IN URBAN ECUADOR: 1988-1993 (Thousand Nov-1988 sucres/month)

Year	1988	1989	1990	1991	1992	Jul-93	Nov-93
Mean Wage	37.9	32.2	31.4	30.8	29.6	31.7	34.7
Mean Wage for:							
Modern Sector	44.8	36.9	36.8	36.8	34.9	37.8	41.7
Informal Sector	23.4	20.8	20.0	22.4	18.9	18.5	21.7
Agriculture	38.0	35.0	25.5	27.4	27.2	24.2	29.1
Domestic Service	9.8	10.8	9.7	9.3	9.3	9.9	9.5
Males	42.6	35.8	35.1	33.8	32.5	34.1	38.4
Females	29.1	25.5	24.4	25.0	24.3	26.7	27.8
Private Sector	32.8	28.5	27.1	27.2	26.2	28.1	31.8
Public Sector	50.1	40.9	41.7	41.2	39.1	42.0	44.4
Wages/Total Income	0.584	0.513	0.520	0.553	0.513	0.531	0.488
Standard deviation of wages	40.5	31.6	38.3	37.1	30.9	32.4	48.2
Coefficient of Variation of wages	1.07	0.98	1.22	1.21	1.05	1.02	1.39
Non-wage income							
Mean	34.8	39.6	36.7	37.6	33.4	36.6	42.3
Standard Deviation	52.4	46.7	42.5	72.1	60.7	62.6	72.4
Coefficient of Variation	1.51	1.18	1.16	1.92	1.82	1.71	1.71
Mean Total Income among Earners	37.8	36.4	34.6	34.6	32.5	34.9	39.4

Note: Domestic service wages include only their monetary component. Additional in-kind remuneration has not been estimated.

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

TABLE 14

REAL WAGES IN QUITO AND GUAYAQUIL: 1987-1993
(Thousand Nov-1988 sucres/month)

Year	1987	1988	1989	1990	1991	1992	Jul-93	Nov-93
Mean Wages:								
Total	48.4	42.3	35.2	35.1	34.2	33.0	36.1	40.8
Modern Sector	55.3	48.4	39.6	40.1	39.2	37.8	41.4	47.3
Informal Sector	31.1	25.2	21.7	20.7	25.9	20.3	19.8	24.4
Agriculture	83.3	57.5	47.5	31.0	35.2	46.9	37.4	46.9
Domestic Servants	13.7	11.6	12.5	11.1	10.2	10.3	11.1	10.8
Males	55.2	48.3	39.9	39.5	37.7	36.7	39.6	45.6
Females	36.5	31.5	27.5	27.2	28.0	26.9	29.8	32.4
Private Sector	43.1	37.6	31.7	30.2	30.5	29.9	33.0	38.6
Public Sector	64.8	55.8	45.0	48.2	46.4	43.7	47.5	49.2
Wages/total income	0.611	0.613	0.553	0.591	0.623	0.578	0.564	0.544
Standard deviation of wages	59.3	45.4	35.4	44.2	41.2	35.3	37.9	57.4
Coefficient of Variation of wages	1.226	1.074	1.006	1.258	1.205	1.069	1.049	1.408
Standard Deviation of Wages in:								
Formal Sector	65.0	48.9	37.3	48.6	45.4	37.8	40.7	63.9
Informal Sector	21.2	19.2	14.7	13.0	28.8	17.0	15.6	20.4
Coefficient of Variation of Wages in:								
Formal Sector	1.177	1.011	0.941	1.210	1.156	1.000	0.982	1.350
Informal Sector	0.680	0.762	0.675	0.629	1.115	0.838	0.789	0.837

Note: Domestic service wages include only their monetary component. Additional in-kind remuneration has not been estimated.

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

TABLE 15

URBAN LABOUR FORCE COMPOSITION: 1988-1993
(Percentages)

YEAR	1988	1989	1990	1991	1992	Jul-93	Nov-93
Properly Employed Modern Sector	36.7	32.9	30.0	32.6	30.2	29.9	30.4
Underemployed Modern Sector:							
-Invisible Underemployment	4.0	5.9	9.0	3.7	5.3	5.0	4.4
-Visible Underemployment	2.7	3.6	1.4	1.7	1.3	2.4	2.2
Unemployed:							
-Former workers	3.6	4.1	2.9	3.0	5.1	5.6	5.1
-New workers	2.9	3.8	3.2	2.7	3.8	3.8	3.3
Other (Ignored) Modern Sector	0.4	0.4	2.5	3.5	1.4	1.3	2.0
Subtotal: Modern Sector	50.3	50.6	48.9	47.2	47.1	48.1	47.4
Informal Sector	38.7	38.5	39.4	40.5	41.3	40.8	40.6
Agriculture	5.8	6.4	6.4	7.0	6.0	6.3	6.7
Domestic Servants	5.1	4.5	5.3	5.4	5.6	4.8	5.3
Subtotal: Non-modern activities	49.7	49.4	51.1	52.8	52.9	51.9	52.6
EAP	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Open unemployment rate	6.5	7.9	6.1	5.6	8.9	9.4	8.3
Global Participation Rate among Persons Older than 12 Years	54.9	56.3	55.8	60.4	62.2	61.6	60.6
Female Participation in EAP	36.0	37.5	36.8	39.3	40.5	38.2	39.7

Note: A worker in the modern sector is properly employed when is not underemployed. Underemployment in the modern sector is visible when a person works involuntarily less than full time (40 hours week). A worker is affected by invisible underemployment when works at least 40 hours/week, and his/her salary is below the legal minimum wage.

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

Labour Force Composition. Several changes in labour structure can be mentioned. First, there is a non-reversed 6% reduction in the share of adequate employment in the modern sector between 1988 and 1993.[48] The drop is mostly due to the contraction in public employment, coupled

[48] A worker in the formal sector has adequate employment when is not underemployed. See definitions in Table 15.

with a stagnation in the modern private sector. As modern employment shrunk, open unemployment rates went up from 6.1% in 1989 to 9.4% in 1992 and 8.3% in 1993, and the share of the informal sector increased as well (See Tables 15 and 16).

TABLE 16

URBAN LABOUR FORCE COMPOSITION: 1988-1993
MAIN SECTORS AND CATEGORIES
(Percentages)

YEAR	1988	1989	1990	1991	1992	Jul-93	Nov-93
Main Sectors							
Manufacturing	17.8	17.5	18.0	17.1	16.5	16.4	17.7
Construction	7.4	7.0	7.4	6.8	6.8	6.3	6.2
Tertiary Sector (excluding utilities)	67.7	67.8	66.2	67.4	69.0	69.2	67.4
Occupational Categories							
Employers	7.9	7.5	4.9	6.0	7.8	8.4	7.8
Self-employed	24.8	26.9	29.1	27.9	28.0	26.1	27.9
Unremunerated Family Workers	3.9	4.2	6.4	5.9	6.7	7.4	6.1
Public Servants	18.1	17.7	17.2	16.0	14.7	14.4	13.7
Wage Earners in Private Sector	39.7	38.7	37.8	39.3	38.4	39.7	40.0
Domestic Servants	5.6	5.0	4.6	4.9	4.4	3.9	4.6
Subtotal: Wage Earners	63.4	61.4	59.6	60.2	57.5	58.1	58.2
EAP	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

A second transformation is an increase in participation rates, particularly among females. There is a clear negative correlation between average wages and participation rates. As wages decline (increase), participation rates go up (down). As mentioned, this backward bending labour supply behavior seems to be a subsistence strategy adopted by poor families to face the crisis, and it has strong negative effects on educational enrolment.

Third, percentages of wage earners present a declining trend, as both self-employed and non-remunerated family workers increase their shares. The change corroborates a strong pressure among poor families to "invent" secondary jobs, as labour conditions in formal markets deteriorate.

No clear changes in the sectoral composition of labour were identified. Manufacturing

employment declined up to 1992 but recovered in 1993. This suggests the emergence of new dynamic activities, which may be oriented to the Andean or extra-regional markets. Further research is important to identify employment shifts in detail.

The wage recovery in 1993 is not coupled with a reduction in income concentration. Neither an important improvement in underemployment or unemployment is observed. The evolution suggest that changes are not simply reversible movements associated with a recession-recovery cycle. Conversely, a new context with higher income concentration, an income transfer form labour to capital, and a different structure in the labour market seems to be emerging, as a result of trade liberalization, technological change and structural adjustment.

Educational Returns. Labour market conditions are presumably affected by the rapid technological change which has been reshaping the world economy since the mid 1970s. In addition, internal factors like labour deregulation and a persistent and high inflation may have influenced labour market conditions.[49] Trade liberalization and the recent currency overvaluation also probably helped to induce technological innovations, while negatively affecting traditional small scale production. As export expansion and diversification has been weak in Ecuador, the expected positive effects of export promotion among unskilled workers were probably small, particularly in the urban sector.

To probe the impact of economic policies and new international conditions on the labour market, I elaborated a multiple regression model. The first version of the model was applied to wage earners in the urban sector from November 1888 to November 1993. A more specific model was used for wage earners in Guayaquil and Quito only, between 1987 and 1993. The dependent variable was monthly wages (in constant 1988 sucres), introduced in logarithmic form.

The following independent variables were selected:

* Years of formal education, included in quadratic form.
* Years of experience, included in a cubic polynomial form.
* Time in years (ranging from 0 to 5, for the 1988-1993 period, and from 0 to 6 for the 1987-1993 period). Time was included in quadratic form.
* A dummy variable for female workers.
* A dummy variable for informal workers (excluding agricultural workers and domestic servants).
* A dummy variable for agricultural workers.
* A dummy variable for domestic servants.
* A dummy variable for public servants.
* Several meaningful and statistically significant interactions between the above variables.

Results of the two regressions are presented in Tables 17 and 18, Tables 19 and 20 contain

[49]Inflation during the adjustment period, and particularly after 1986, has been unusually high in the Ecuadorean historical context. See Table 2.

wage regression estimates for the most important categories, and some relevant partial functions are plotted in Charts 5, 6, and 7. A simpler version of the model is presented in Appendix Table 4, to facilitate comparisons with results from other countries. Given the size of the sample, all variables have statistically significant coefficients. The following conclusions can be derived from the models:

As mentioned earlier, there is a strong gender difference in wages, that suggest a discrimination against women. Other things being equal, female wages are about 22.6% lower than male wages. In the two main cities, were female participation is higher, modern activities are concentrated and poverty is lower, the difference is almost the same (20.5%). Separate regression results for each year show that there is no change in gender difference during the period.

TABLE 17

MULTIPLE REGRESSION RESULTS FOR THE URBAN SECTOR

Multiple R	.6665
R Squared	.4442
Adjusted R Squared	.4437
Standard Error	.5580

Dependent Variable: LOGWAG88

Variables in the Equation

Variable	B	SE B	T	Sig T
EDUCFOR	.035121	.007230	4.858	.0000
EDUCFOR2	.002173	3.3603E-04	6.468	.0000
EXPERIEN	.055689	.002136	26.074	.0000
EXPERIE2	-.001301	9.3506E-05	-13.916	.0000
EXPERIE3	8.81838E-06	1.1312E-06	7.796	.0000
FEMALE	-.256450	.009674	-26.509	.0000
INFORMAL	-.104862	.030871	-3.397	.0007
AGRICULT	-.076218	.034895	-2.184	.0290
DOMESTIC	-.521241	.041254	-12.635	.0000
YEAR1	-.142582	.012922	-11.034	.0000
YEAR2	.025103	.001776	14.135	.0000
YEAREDUC	-.005179	.002013	-2.573	.0101
PUBLIC	.208088	.054666	3.807	.0001
EDUCPUB	.006253	.010195	.613	.5396
EDUC2PUB	-.001598	4.4608E-04	-3.583	.0003
DOMEEDUC	-.019404	.006141	-3.160	.0016
INFOEDUC	-.019102	.003323	-5.748	.0000
AGRIEDUC	.008212	.003948	2.080	.0375
YEAREDU2	3.06245E-04	9.6042E-05	3.189	.0014
(Constant)	9.348340	.039745	235.207	.0000

TABLE 17 (CONTINUATION)

Meaning of variable names:

LOGSAL88: Natural Logarithm of Wages (Nov-1988 sucres/month)

EDUCFOR: Years of formal education.
EDUCFOR2: EDUCFOR squared.
EXPERIEN: Years of experience.
EXPERIE2: EXPERIEN Squared.
EXPERIE3: $(EXPERIEN)^3$.
FEMALE: Dummy for females.
INFORMAL: Dummy for informal sector.
AGRICULT: Dummy for agricultural workers.
DOMESTIC: Dummy for domestic servants.
YEAR1: Year (1988=0).
YEAR2: YEAR1 squared.
YEAREDUC: (YEAR1) x (EDUCFOR) interaction.
PUBLIC: Dummy for public servants.
EDUCPUB: (PUBLIC) x (EDUCFOR) interaction.
EDUC2PUB: (PUBLIC) x (EDUCFOR2) interaction.
DOMEEDUC: (DOMESTIC) x (EDUCFOR) interaction.
INFOEDUC: (INFORMAL) x (EDUCFOR) interaction.
AGRIEDUC: (AGRICULT) x (EDUCFOR) interaction.
YEAREDU2: (YEAR1) x (EDUCFOR2) interaction.

Note: Workers with very low wages (lower than 3000 sucres/month) and very high estimated experience (greater than 70 years) were excluded from the regression.

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

Labour market segmentation is also apparent. Generally, non-formal workers have both lower wages and lower educational returns. As Chart 6 ant Tables 19 and 20 show, returns for primary education in the informal sector are low and present a declining trend over time, becoming negligible in Quito and Guayaquil in 1993 (The primary instruction/no-education increment dived from 18.2% in 1987 to 3.6% in 1993). Domestic servants have a similar situation. In the case of urban agricultural workers, wages are 7.3% lower, but educational returns are even slightly higher than in the modern sector.

Educational returns and wage differentials in the public sector are largely different from those of the modern private sector. Given the regulated labour conditions in the public sector, wages are higher for low educational levels, but educational returns are lower. As a result, for skilled labour, wages in the private sector are higher. (See Chart 6).

TABLE 18

MULTIPLE REGRESSION RESULTS FOR QUITO AND GUAYAQUIL

Multiple R	.7119
R Squared	.5068
Adjusted R Squared	.5061
Standard Error	.5333

Dependent Variable: LOGSAL88

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.028841	.006961	4.143	.0000
EDUCFOR2	.003176	3.2086E-04	9.899	.0000
EXPERIEN	.056230	.002298	24.465	.0000
EXPERIE2	-.001352	1.0153E-04	-13.318	.0000
EXPERIE3	9.63086E-06	1.2431E-06	7.747	.0000
FEMALE	-.229245	.010026	-22.866	.0000
AGRICULT	.110569	.028402	3.893	.0001
DOMESTIC	-.538339	.041979	-12.824	.0000
INFORMAL	-.062210	.033834	-1.839	.0660
YEAR1	-.144116	.014549	-9.906	.0000
YEAR2	.018402	.002103	8.750	.0000
YEAREDUC	-.005170	.001904	-2.715	.0066
YEAREDU2	-1.69511E-04	1.1574E-04	-1.465	.1431
YEA2EDU2	6.95871E-05	1.2999E-05	5.353	.0000
DOMEEDUC	-.014007	.006361	-2.202	.0277
INFOEDUC	-.019976	.003544	-5.637	.0000
PUBLIC	.154524	.063850	2.420	.0155
EDUCPUB	.020944	.011638	1.800	.0719
EDUC2PUB	-.002192	4.9540E-04	-4.425	.0000
(Constant)	9.505935	.039079	243.247	.0000

TABLE 18 (CONTINUATION)

Meaning of variable names:

LOGSAL88: Natural Logarithm of Wages (Nov-1988 sucres/month)

EDUCFOR: Years of formal education.
EDUCFOR2: EDUCFOR squared.
EXPERIEN: Years of experience.
EXPERIE2: EXPERIEN Squared.
EXPERIE3:$(EXPERIEN)^3$.
FEMALE: Dummy for females.
INFORMAL: Dummy for informal sector.
AGRICULT: Dummy for agricultural workers.
DOMESTIC: Dummy for domestic servants.
YEAR1: Year (1987=0).
YEAR2: YEAR1 squared.
YEAREDUC:(YEAR1) x (EDUCFOR) interaction.
YEAREDU2:(YEAR1) x (EDUCFOR2) interaction.
YEA2EDU2:(YEAR2) x (EDUCFOR2) interaction.
PUBLIC: Dummy for public servants.
EDUCPUB: (PUBLIC) x (EDUCFOR) interaction.
EDUC2PUB:(PUBLIC) x (EDUCFOR2) interaction.
DOMEEDUC:(DOMESTIC) x (EDUCFOR) interaction.
INFOEDUC:(INFORMAL) x (EDUCFOR) interaction.
AGRIEDUC:(AGRICULT) x (EDUCFOR) interaction.

Note: Workers with very low wages (lower than 3000 sucres/month) and very high estimated experience (greater than 70 years) were excluded from the regression.

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

Broadly speaking, education presents increasing returns to scale. The wage-education function, other things being equal, is a positively concave parabola. However, the concavity of the curve changes both for different labour markets and over time. The wage-experience function, on the other hand, follows a third-degree polynomial. The wage-education-experience regression surface is plotted in Chart 7 for the year 1993. Its shape changes over time, and also for different sectors.[50]

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[50] All functions are analyzed and plotted in semi logarithmic scale.

TABLE 19

WAGE REGRESSION ESTIMATES BY YEAR, CATEGORY AND EDUCATIONAL LEVEL (Thousand November-1988 sucres/month)
TOTAL URBAN SECTOR

YEAR	1988	1989	1990	1991	1992	1993
FORMAL SECTOR, MALES, PRIVATE SECTOR						
No education	21.2	18.9	17.6	17.3	17.9	19.5
Primary completed	28.3	24.7	22.6	21.8	22.1	23.5
Secondary completed	44.2	38.6	35.5	34.2	34.7	37.1
University completed	80.7	72.2	67.9	67.2	69.8	76.4
INDICES						
University/Secondary	1.826	1.870	1.915	1.962	2.010	2.059
University/Primary	2.850	2.925	3.002	3.082	3.163	3.246
University/No education	3.805	3.828	3.851	3.874	3.897	3.921
Primary/No education	1.335	1.309	1.283	1.257	1.232	1.208
Secondary/No education	2.084	2.047	2.010	1.974	1.939	1.904
FORMAL SECTOR, MALES, PUBLIC SECTOR						
No education	26.1	23.2	21.7	21.3	22.1	24.0
Primary completed	34.2	29.8	27.3	26.3	26.7	28.4
Secondary completed	46.6	40.7	37.4	36.1	36.6	39.1
University Completed	66.3	59.3	55.8	55.1	57.3	62.7
INDICES						
University/Secondary	1.422	1.456	1.492	1.528	1.565	1.603
University/Primary	1.939	1.990	2.043	2.096	2.152	2.209
University/No education	2.537	2.552	2.568	2.583	2.599	2.614
Primary/No education	1.309	1.283	1.257	1.232	1.208	1.184
Secondary/No education	1.785	1.753	1.721	1.691	1.660	1.631

TABLE 19 (CONTINUATION)

YEAR	1988	1989	1990	1991	1992	1993
INFORMAL SECTOR, MALES						
No education	19.1	17.0	15.9	15.6	16.1	17.5
Primary completed	22.7	19.8	18.2	17.5	17.7	18.9
Secondary completed	31.7	27.6	25.4	24.5	24.9	26.6
University completed	51.5	46.1	43.4	42.9	44.6	48.8
University/Secondary	1.628	1.667	1.708	1.750	1.792	1.836
University/Primary	2.266	2.326	2.387	2.450	2.515	2.581
University/No education	2.698	2.714	2.730	2.747	2.763	2.780
Primary/No education	1.190	1.167	1.144	1.121	1.099	1.077
Secondary/No education	1.657	1.628	1.598	1.570	1.542	1.514

Notes:
1) Female wage estimates are proportional and 22.6% lower.
2) As professionals and technicians are excluded from the informal sector by definition, estimates for informal workers with completed university are included only to facilitate comparisons. Nevertheless, informal workers with uncompleted university have a slightly lower wage estimate.
3) Estimates correspond to workers with average experience (17 years).

Source: Table 17.

Controlling for all other variables, wages declined from 1988 to 1991 and partially recovered in 1992 and 1993, following a positively concave parabolic trend. The evolution for Quito and Guayaquil is similar, beginning with a strong decline between 1987 and 1988. Not all wages, however, dropped in the same proportion. Generally, unskilled workers were the most affected, as both wages and educational returns dived for them. In fact, educational returns for unskilled (uneducated) labour declined dramatically, from 3.6% for year of education in 1988 to 0.9% 1993. In contrast with unskilled labor, educational returns for skilled workers (with tertiary education) increased over time. For the sixth year of university, they moved form 12% in 1988 to 15% in 1993.[51] The ratio between educational returns of skilled labour and unskilled labour also increased over time.

[51] Educational return figures correspond to the modern sector.

TABLE 20

WAGE REGRESSION ESTIMATES BY YEAR, CATEGORY AND EDUCATIONAL LEVEL (Thousand November-1988 sucres/month) QUITO AND GUAYAQUIL

YEAR	1987	1988	1989	1990	1991	1992	1993
FORMAL SECTOR, MALES, PRIVATE SECTOR							
No education	24.8	21.9	20.0	19.0	18.7	19.1	20.3
Primary completed	33.1	28.2	25.0	23.2	22.4	22.5	23.6
Secondary Completed	55.3	45.2	39.1	35.8	34.7	35.6	38.6
University Completed	116.6	90.7	76.6	70.2	69.8	75.3	88.3
INDICES							
University/Secondary	2.106	2.005	1.958	1.960	2.012	2.117	2.285
University/Primary	3.528	3.222	3.062	3.030	3.121	3.345	3.733
University/No education	4.703	4.148	3.828	3.696	3.732	3.943	4.358
Primary/No education	1.333	1.288	1.250	1.220	1.196	1.179	1.167
Secondary/No education	2.233	2.069	1.955	1.886	1.855	1.862	1.907
FORMAL SECTOR, MALES, PUBLIC SECTOR							
No education	28.9	25.5	23.4	22.2	21.8	22.3	23.6
Primary completed	40.4	34.4	30.6	28.3	27.4	27.5	28.9
Secondary Completed	60.6	49.5	42.8	39.2	38.0	38.9	42.3
University Completed	97.5	75.9	64.1	58.7	58.4	63.0	73.8
INDICES							
University/Secondary	1.609	1.532	1.496	1.498	1.537	1.618	1.746
University/Primary	2.413	2.203	2.094	2.072	2.134	2.288	2.553
University/No education	3.370	2.973	2.743	2.648	2.674	2.826	3.123
Primary/No education	1.397	1.349	1.310	1.278	1.253	1.235	1.223
Secondary/No education	2.094	1.940	1.834	1.768	1.740	1.746	1.788

TABLE 20 (CONTINUATION)

YEAR	1987	1988	1989	1990	1991	1992	1993
INFORMAL SECTOR, MALES							
No education	23.3	20.5	18.8	17.8	17.6	18.0	19.0
Primary completed	27.6	23.5	20.8	19.3	18.6	18.8	19.7
Secondary Completed	40.9	33.5	28.9	26.5	25.7	26.3	28.6
University Completed	76.5	59.5	50.2	46.0	45.8	49.4	57.9
INDICES							
University/Secondary	1.868	1.779	1.737	1.738	1.785	1.878	2.027
University/Primary	2.776	2.535	2.410	2.384	2.455	2.632	2.937
University/No education	3.282	2.896	2.672	2.579	2.605	2.752	3.042
Primary/No education	1.182	1.142	1.109	1.082	1.061	1.046	1.036
Secondary/No education	1.757	1.628	1.539	1.484	1.460	1.465	1.500

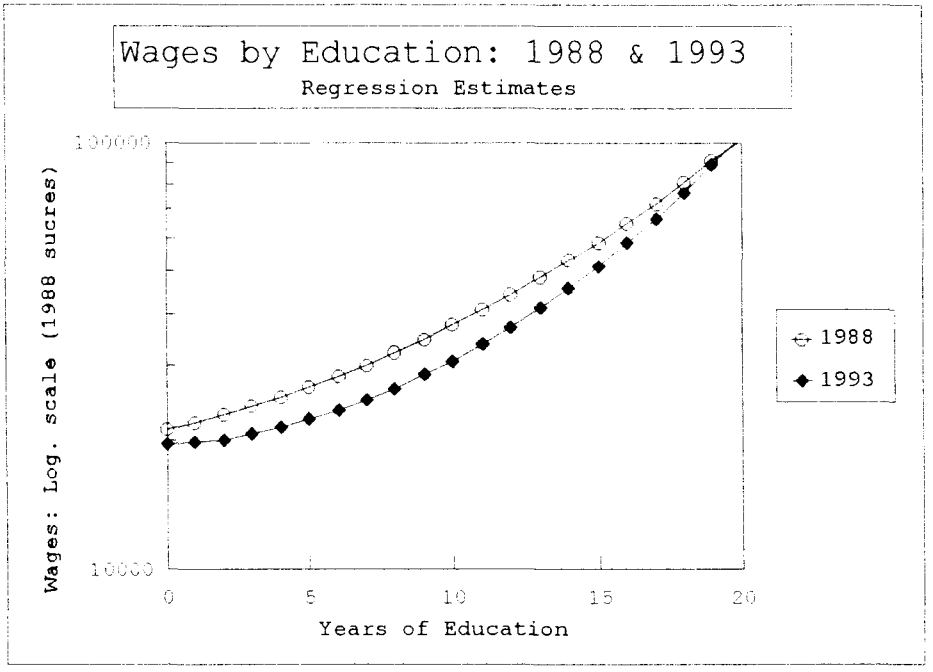
Notes:
1) Female wage estimates are proportional and 20.5% lower.
2) As professionals and technicians are excluded from the informal sector by definition, estimates for informal workers with completed university are included only to facilitate comparitiones. Nevertheless, informal workers with uncompleted university have a slightly lower wage estimate.
3) Estimates correspond to workers with average experience (17 years).

Source: Table 18.

The transformation in the wage-education function can be observed in Chart 5. The function in 1988 is scarcely concave. Between that year and 1993, two changes took place. First, wages declined, moving the curve downwards; and second, the concavity of the function increased, as educational returns dived for unskilled workers and rose for high educational levels.

To analyze closely increasing returns to scale in education, I performed separate regressions for each year, with all the variables except time. The non-linear behavior of the function can be evaluated by the concavity of the wage-education function, which is the second partial derivative of wages with respect to education. Results are reported in Table 21, and regressions for each year are presented in Appendix Table 3 . Two main conclusions can be derived from the analysis. First, the concavity of the functions increases continuously and smoothly over time, between 1998 and 1993. Consequently, the transformation can likely be linked to a continuous process of technological change diffusion, rather than being an effect of trade liberalization alone. Trade liberalization was implemented sharply in 1990-1991 and its effects on other variables, such as wages, Gini coefficients and unemployment rates, were also well defined over time.

CHART 5

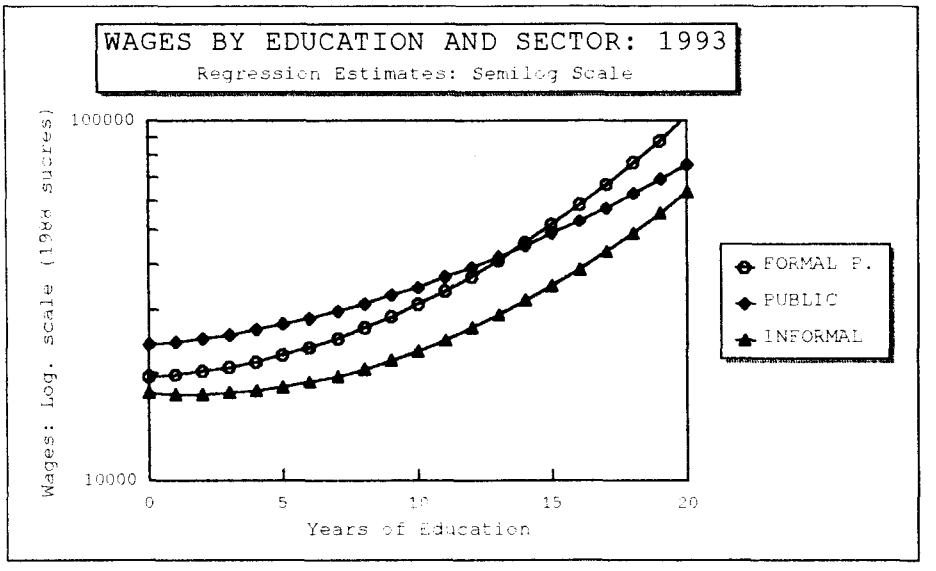


Note: A male worker in the formal private sector with an average experience level is assumed.

Source: Table 17.

The regression for Quito and Guayaquil during the 1987-1993 period is similar, but 1987 presents a particular characteristic, with a high concavity. It seems that the concavity in that year was high, declined later and became even higher during the 1990s. Although no evident interpretation of this particular evolution is presented here, it can be hypothetically assumed that the initial high concavity of the curve was due to a lasting effect of the labour market transformation experienced in the metropolitan centres during the oil boom years (1972-1982), when a extremely rapid expansion of skilled labour demand took place, while the supply evolution was delayed and frequently inappropriate, increasing educational returns for educated labour. As the secondary and university enrolment went up in the late 1970s and early 1980s, a massive flow of educated workers entered the labour market in the late 1980s, when labour demand was affected by the economic crisis, flattering the wage-education curve. During the 1990s, as a result of technological change, trade liberalization and a massive decline in educational enrolment and (presumably) quality, the function concavity went up again.

CHART 6



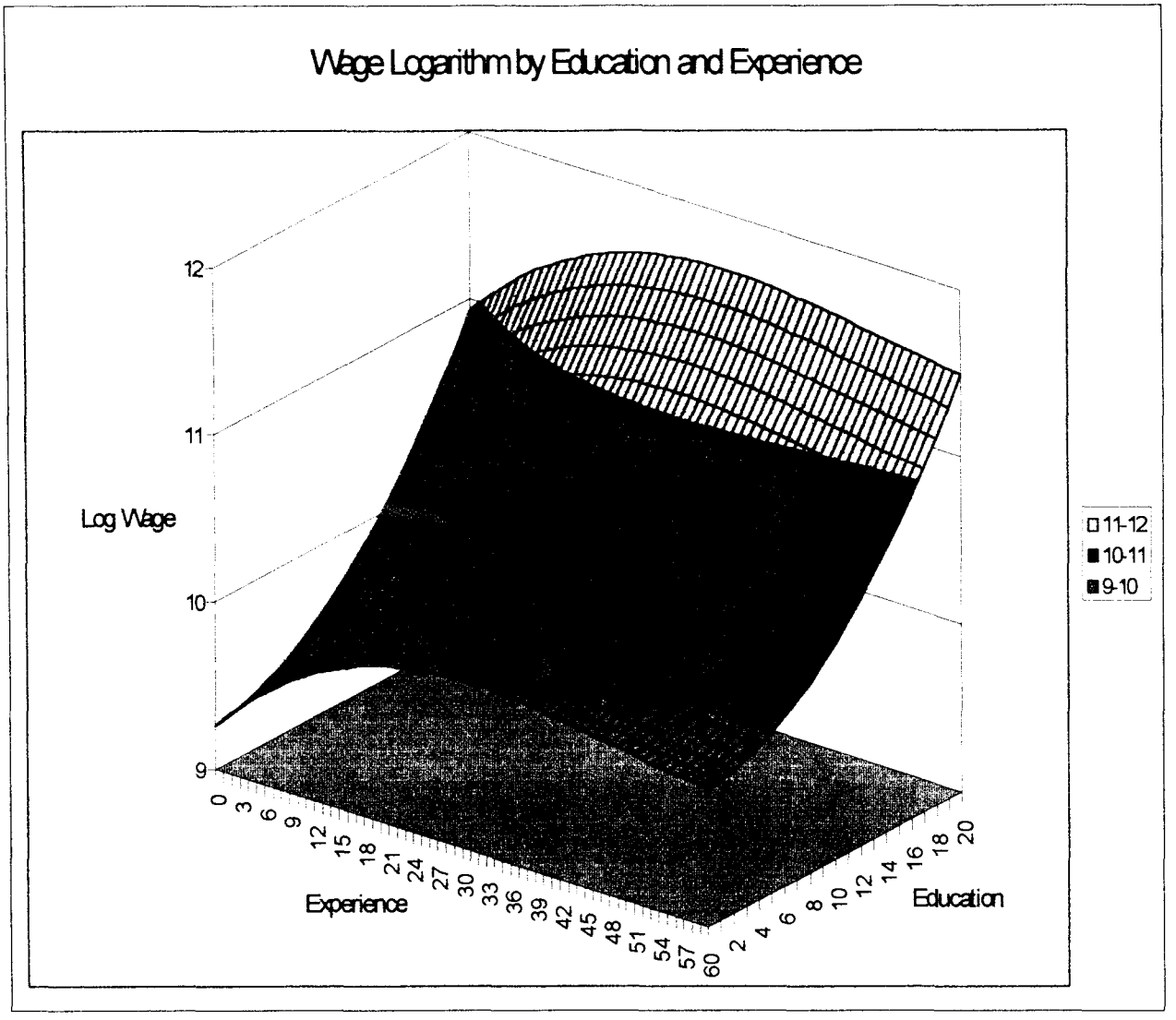
Note: "Formal P." stands for formal private. A male worker with an average experience is assumed.

Source: Table 17.

Finally, to measure wage dispersion within categories, I selected two indicators: the multiple correlation coefficients and the standard error of individual-year regressions. Information suggests, albeit not conclusively, an increasing wage dispersion within categories over time.

Summarizing, a segmented labour market structure prevails in Ecuador, as the formal private, public and informal sector present particular traits. Gender differences are also high and stable. During the 1988-1993 period, as wages declined, educational returns changed, dropping for low educational levels and rising for skilled labour. Additionally, within-category wage dispersion seems to has rose as well. Thus wages feel and became more heterogeneous and concentrated. The transformation seems to be a complex result of different factors, such as technological change, trade liberalization, labour deregulation, low economic growth and weak export expansion.

CHART 7



Note: A male worker in the private formal sector in 1993 is assumed. Natural logarithms are used in the wage scale.

Source: Table 17.

TABLE 21

SELECTED COEFFICIENTS OF SEPARATED REGRESSIONS FOR EACH YEAR:

1988-1993 (TOTAL URBAN POPULATION)

Dependent Variable: LOGWAG88 (Natural Logarithm of monthly wages in constant Nov-1988 sucres)

Year	Second Partial Derivative of LOGWAG88 with respect to EDUCFOR	Correlation Coefficient R	Standard Error of Regression
1988	0.00328	0.688	0.547
1989	0.00522	0.672	0.512
1990	0.00676	0.652	0.555
1991	0.00576	0.634	0.602
1992	0.00680	0.657	0.573
Jul-1993	0.00634	0.650	0.567
Nov-1993	0.00792	0.658	0.597

Sources: Appendix Table 3.

CONCLUSIONS.

Ecuador's economic record, during the post-1982 period, has been weak. Structural adjustment policies and export promotion strategies failed to strengthen exports and resume economic growth. From the political viewpoint, policy reforms have been adopted in a painful and conflictive way, without receiving a stable and coherent political support from the civil society. They even lacked a consensual support from dominant classes. As a result, policy reforms were applied in a midst of chronic political conflict, with poor economic coherence and political credibility. The reform-conflict-reversal cycle has prevailed in the country political scene for more than a decade. Nevertheless, the most important structural adjustment policies have been implemented and export promotion has been adopted as a long term development strategy.

After twelve years of reforms, per capita income remains flat at about its pre-crisis levels, investment/GDP ratios are still depressed, productive foreign investment has been scarce, and export performance is disappointing, albeit presenting signs of recovery. Moreover, inflation remains high, the foreign debt surpasses GDP and is still growing, fiscal revenues are weak, and the domestic currency is overvalued.

In spite of an important expansion in both oil and non-oil export volumes, export purchasing power remains depressed below its pre-crisis average. Moreover, export diversification has been weak, as non-traditional exports to developed countries account for less than 5% of total exports, and the country has been unable to significantly include manufactured products in its export basket.

Although an explanation of the weak economic results of structural adjustment and export promotion in Ecuador remains beyond the objectives of this paper, some tentative and hypothetical factors can be mentioned.

I will begin by analyzing common traits with other small Latin American countries. Even though Latin American manufactured exports expanded significantly from the early 1980s onwards, this change has been uneven and concentrated in a particular group of countries, including the largest ones (Brazil, Mexico and Argentina) and Colombia. All of them have experienced long processes of import substituting industrialization since the 1930s, and had, at the early 1980s, medium or large internal markets, a long manufacturing tradition, a significant financial infrastructure, a significant human capital development, and other externalities. Conversely, most smaller countries presented weak installed manufacturing capacity and financial infrastructure, small and concentrated internal markets, low levels of education and human capital development, and less diversified natural resource endowments.

As Buitelaar and Fuentes point out, export diversification has been limited in all small Latin American economies, with the only exception of Costa Rica.[52] Exports from Ecuador, Bolivia and most Central American countries are still based on a small group of primary products. Manufactured exports are not large, and remain limited to traditional activities, such as textiles. Thus the capacity of Latin American countries to diversify their exports and consolidate their insertion in international markets, upon export promotion strategies, is partially a function of both domestic market sizes achieved levels of development. The largest and most industrialized countries in the region have been able to take advantage of pre-existing scale economies, internal linkages, skilled labor, financial, institutions, physical infrastructure and other positive externalities derived from their import substitution phase of industrialization. Conversely, small and less diversified countries usually lack those acquired advantages, and present serious constraints to industrialization, such as lack of skilled labour and adequate financial institutions; limited energy and water supply, transportations systems and physical infrastructure; and reduced markets which do not allow to obtain scale economies. Therefore the availability of cheap unskilled labour is not a significant comparative advantage for export diversification, unless included in a wider set of features usually derived from a long manufacturing tradition.

At the international level, rapid transformations have taken place in the world economy since the mid 1970s, when the crisis of the Fordist regime of accumulation began. As a result of rapid technological change and the massive diffusion of information and communications technology,

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[52] See Rudolf Buitelaar and Juan Fuentes, "The Competitiveness of the Small Economies of the Region", **CEPAL Review** 43 (April 1991), 83-96.

biotechnology and other innovations, emerging technologies are less labour intensive, and save both energy and raw materials. The internationalization of production has led to a new international division of labour where traditional comparative advantages of small Latin American countries -- cheap unskilled labour and natural resources-- are less important than before. The combined effects of technical change, the internationalization of production and raw-material substitution have resulted in a declining participation of raw materials, fuels and foodstuffs in both international trade and world markets, while new comparative advantages are related to the development of human capital and the capacity to integrate and assimilate technological change.[53] It is not surprising that Latin American share in world exports dropped from 12.4% in 1950, to 5.5% in 1970 and 3.9% in 1990.[54]

The simultaneous application of export promotion policies by small Third World economies has led to a frequent oversupply in primary product markets, while technological change has negatively affected demand. This situation resulted in a severe decline of terms of trade for most primary products. Under these international conditions, prospects for economic recovery based on primary export promotion seem seriously limited.

At the same time, structural adjustment policies have negatively affected public expenditure in education and health and hence human capital formation, reducing even more the potential for dynamic comparative advantages in small countries. Moreover, market-friendly policies discouraged state-induced export promotion policies, which helped successful South East Asian countries to move to higher echelons in the international division of labor.[55]

Summarizing, the application of market-friendly export promotion and structural adjustment policies in small Third World countries, under the current international conditions, does not seem to be an efficient way to increase export purchasing power, given the shrinking relevance of cheap unskilled labour and other traditional comparative advantages of these countries.

Common traits with other small Latin American countries explain only partially the inadequate results of SAP in Ecuador. Export diversification, and particularly the expansion of manufactured exports in Ecuador have been weaker than in most small LAC countries. Moreover, at least one small country, Costa Rica, have achieved a remarkable diversification. Only country-specific factors can explain the diversity of outcomes among small economies in the region. Several specific thesis have been posed to analyze the Ecuadorean experience.

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[53] See Manuel Castells, "The Informational Economy and the New International Division of Labor", in **The New Global Economy in the Information Age**, by Martin Carony, Manuel Castells, Stephen Cohen and Fernando Henrique Cardoso, University Park: The Pennsylvania State University Press, 1993; David Harvey, **The Condition of Postmodernity.**

[54] See FAO, **La Política Agrícola en el Nuevo Estilo de Desarrollo Latinoamericano**, Santiago: FAO, 1994.

[55] See Robert Wade, **Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization**, Princeton: Princeton University Press, 1990; Frederic Deyo, **The Political Economy of the New Asian Industrialism**, New York: Cornell University Press, 1988; Gary Gereffi and Donald Wyman, eds., **Manufacturing Miracles: Paths of Industrialization in Latin America and East Asia**, Princeton: Princeton University Press, 1990.

According to Hofman and Buitelaar, Ecuador's economic growth has been historically based on natural-resource export cycles, and affected by high long-term instability.[56] As a result, both a rent-seeking behavior among Ecuadorian entrepreneurs, and lasting "Dutch Disease"effects have reduced the country's potential for export diversification. Consequently, an export promotion strategy, based mostly on market-friendly mechanisms, have reduced prospects in Ecuador, and a well defined regulatory state role is necessary to achieve long term growth.

De Janvry et al point out a set of economic, social, political and institutional factors.[57] A deep-rooted regionalism, and the prevalence of highly specialized regional-based portfolios within capitalist classes have prevented the emergence of a national-based dominant class, able to consolidate consensus or hegemony. Particular interest groups prevailed instead in policy making. Additionally, Dutch Disease have created a "bonanza philosophy"among elites, with little inclination to sacrifices. "Interest groups are highly divided and parochial in their demands, pursuing predatory ends with little co-operation in the quest for net social gains".[58] Additionally, a political system with highly fragmented and unstable parties makes difficult to achieve lasting alliances.

From a comparative perspective, Thorp analyzes the contrast between Colombia and Peru in the historical evolution of their macro economic management capabilities.[59] While the former has developed an early and strong managerial capacity, the latter performed poorly. Thorp explains the difference studying diverging historical conditions in the constitution of capitalist classes and their relationship with the state. The Ecuadorean experience probably lies between those contrasting cases. Thorp's analysis sheds light on the relationship between the historical constitution of dominant classes and the development of their managerial capacities, both in the private and public sectors.

Based on these arguments and my own research, it can be inferred that Ecuadorean entrepreneurial classes evolved in a historical sequence of easy, albeit short lived, primary export cycles.[60] The extraction of international differential rents played an important role in the process of

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[56]See André Hofman and Rudolf Buitelaar, "Ventajas Comparativas Extraordinarias y Crecimiento a Largo Plazo: El Caso del Ecuador", **Revista de la CEPAL** 54 (December 1994).

[57] See De Janvry et al, **The Political Feasibility of Adjustment in Ecuador and Venezuela.**

[58] Ibid. P. 18.

[59] See Rosemary Thorp, **Economic Management and Economic Development in Peru and Colombia**, Pittsburgh: University of Pittsburgh Press, 1991.

[60] See Carlos Larrea, Malva Espinosa and Paóla Sylva, **El Banano en el Ecuador**, Quito: Corporación Editora Nacional, 1987; Carlos Larrea, "Proyectos Democráticos y Estrategias de Desarrollo para el Ecuador: Una Visión Retrospectiva" (Paper prepared for the Seminar "Democracia, Desarrollo y Descentralización", Universidad de Cuenca, Cuenca, October 1994).

class conformation.[61] Moreover, during the oil boom period, generous state incentives and subsidies allowed rapid accumulation. As a result, a high propensity to sumptuary consumption predominated among Ecuadorean elites, and also oligopolistic and inefficient market structures prevailed in the economy. Under these circumstances, Ecuadorean entrepreneurial classes do not have developed sufficient skills to openly compete and successfully expand in international markets without state protection. Moreover, they have been unable to consolidate an stable and hegemonic political strategy. Consequently, both internal fragmentation (with a strong regional component) and weak economic and political response capacity of entrepreneurial classes affected the results of adjustment programs in Ecuador. Of course, adequate economic skills, social cohesion and political capabilities can only be achieved in the medium term.

Turning to a specific analysis of the social effects of the crisis and adjustment policies, a strong social deterioration is observed from 1982 onwards. Specific information for the 1987-1993 period in the urban sector corroborates the trend. The most important changes are income concentration, declining wages and increased wage dispersion, a reduction in public services, rising poverty levels, a deterioration in the employment structure with higher underemployment and unemployment rates, and a higher heterogeneity in educational returns, affecting unskilled workers. The slight recovery observed in 1993 dos not include a reduction in income concentration, and its future continuity and strength are still unclear.

From a neoclassical perspective, most short term social costs will be outweighed by long term gains of economic recovery. Structural adjustment incentives a production shift from non-tradable to tradable goods, and a sound and stable expansion of export and import competing activities. As these activities will adapt to the relative factor endowments of the country, they will be likely intensive in the use of unskilled labour, and expand employment. Wage dispersion will be reduced, as the country specializes in unskilled labour intensive production, and income distribution will improve as well, as employment in the modern sector absorbs labour surplus in the traditional subsistence sector. Later on, when a labour surplus will be completely absorbed, wages will begin to increase improving social indicators again.

Unfortunately, in the case of Ecuador, signs of economic recovery, transfer from non-tradable to tradable production, and export-based growth, are still weak, and probably continue being so for some time in the future. The expansion in labour demand generated by growth in agricultural exports is small, and does not have significant indirect effects on urban employment and wages. Consequently, short terms social costs of adjustment policies are still dominant, compared with hypothetical future gains. Small Latin American economies are heterogeneous. Nevertheless, both their common problems in export-expansion, and their modest economic results reveal that the Ecuadorean experience may be partially representative.

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[61] A differential rent can be defined as "the residual component of market price over production cost where all reproducible factors of production (labour, capital) are paid at market prices". (Alan Gelb et al., **Oil Windfalls: Blessing of Curse?,** New York: Oxford University Press, 1988, p. 6). The main economic cycles in Ecuador's history have been associated to three primary exports: cacao (1860-1920), bananas (1948-1971) and petroleum (1982 to present).

Although negative short term social repercussions of adjustment policies are evident, it is difficult to identify direct causal links between specific adjustment measures and their social effects. It is also complex to differentiate between the effects of the economic crisis, the adjustment programs, and the transformation in the international context. This is so because of the simultaneity of economic stagnation, the application of different adjustment components --real devaluations, subsidy reduction, labour deregulation, import liberalization, state reduction, and so on-- and the international diffusion of technological change. Despite the adobe problems, some hypothetical social effects of specific adjustment policies and other factors can be mentioned.

Real devaluation produces an increase of relative prices of tradable goods, and therefore reduces real wages. Additionally, devaluations generate at least a short term inflationary effect. Persistent inflation affects negatively wages and income distribution. In oligopolistic market structures, which are prevailing in Ecuador's modern sector, corporations increase prices by modifying their mark-up margin, while both small competitive enterprises in the informal sector and agriculture, and workers are affected. Between 1982 and 1988, repeated devaluations and high fiscal deficits (particularly in 1987) generated a chronic inflationary problem, as inflation rates rose to very high levels by Ecuador's historical standards (see Table 2). In a context of slow economic growth, the devaluation-inflation effect was probably the most important specific mechanism of income transfer from labour to capital. After 1988 real devaluations became moderate and from 1990 a real appreciation in exchange rates reversed the currency trend. Inflation rates declined as well from 75% in 1989 to 27% in 1994, as inflation control became a priority in adjustment policies.[62] Therefore, the regressive effect of inflation and nominal devaluations became smaller.

The expected positive effect of real devaluation on export expansion has been limited in Ecuador to primary products. Bananas is the most important among them, although the effect of devaluation on export growth is hard to demonstrate in this case. The positive employment effect, however, has been mitigated by technological change, as new technologies severely reduce labour demand.[63] In other primary products, like fresh flowers, significant employment expansion has been confined to a micro-regional level. In the case of import-competing products, labour intensity may has increased somewhat.[64]

Subsidy reduction or elimination affected mostly middle and urban popular classes. Food subsidies (wheat, imported powered milk) were reduced in the mid 1980s, and oil subsidies were partially reduced during the 1980s. As inflation repeatedly ate away oil price hikes, oil subsidy prices became chaotic. Only in the mid 1990s oil and energy subsidies were eliminated. As a result of interest rate liberalization adopted in the mid 1980s, credit became more concentrated and subsidized credit for small producers was drastically reduced, thus increasing income concentration. Thus

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[62] See Luis Jácome, "De la Inflación Crónica a la Inflación Moderada en el Ecuador", **Revista de la CEPAL** 52 (April 1994).

[63] See Larrea, Espinosa and Sylva, **El Banano en el Ecuador.**

[64] See Larrea, "The Mirage of Development: Oil, Employment and Poverty in Ecuador (1972-1990)".

regressive effects of real-price policies were spread out during the 1980s and became concentrated after 1992.

Labour market deregulation and wage repression have an obvious negative impact of formal-sector wages, although it is expected to stimulate the adoption of labour intensive technologies in the medium term. This policy was implemented from 1984 onwards.

State reduction policies has different effects. Declining public investment affects employment (particularly in construction) and reduces growth both in the short and medium term. A shrinking state apparatus has adverse direct and indirect effects on urban employment (particularly among middle classes) and also affects labour market structures. Additionally, a decline in social expenditure usually negatively affects non-monetary consumption among popular sectors, as subsidized or free education, health and other social services are cut. The long term negative effect on human capital formation must be considered as well. The reduction of the public sector was a continuous trend in the period, with a concentration after 1992.

Trade liberalization, as mentioned, has a negative impact in formerly protected domestic production, particularly small-scale manufacturing activities, increasing unemployment. Additionally, it incentives sumptuary consumption among elites, thus reducing savings propensity and future growth. Its negative effect on employment and income distribution is clearly suggested by empirical information, which discloses a strong change around 1990, when trade barriers were drastically reduced.

Trade liberalization incentives also the adoption of technical change. New technologies are labour saving, have higher skilled-labour demand, and tend to displace traditional unskilled- labour intensive activities. The continuous change in the educational return structure, and particularly the transformation in the second partial derivative of wages with respect to education,[65] suggest a key role of technical change on the labour market structure.

Finally, debt service generates a large capital outflow and increase pressure on public budgets, take resources away from investment, and delays economic recovery. Debt service has increased over time (excepting some years) becoming very high --7% of GDP-- in the last years.

Summarizing, the specific social effects of adjustment policies are difficult to identify. Nevertheless, it can be hypothetically inferred that some components of the policy reform package, such as state reduction, subsidy elimination have produced a continuous effect, while other policies had concentrated repercussions. Devaluation and inflation social effects prevailed in the early 1980s, whereas trade liberalization has been a strong factor in worsening social conditions since 1990. The observed transformation of educational returns seem to be mostly an effect of the diffusion of new technologies.

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[65] Wages are included in logarithmic form in the regression equation.

Concluding, a strong social deterioration prevailed in Ecuador during the adjustment years, while the expected economic recovery has been elusive. Nevertheless, the country has been able to avoid dramatic social and political crisis which affected other small LAC countries. The case study sheds light on the analysis of the specific economic, social and political conditions of small and medium Latin American countries in the current turbulent times.

APPENDIX TABLE 1

EXPORT PURCHASING POWER BY MAIN PRODUCTS: 1970-1994
(million 1975 US$)

Year	Oil & Derivatives	Bananas	Coffee, Cacao & Elaborates	Fishery Products	Other Products	Total Exports
1970	1.8	151.1	136.5	11	45.5	345.8
1971	1.7	152.5	110.9	24	55.5	344.9
1972	94.2	209.1	124.5	29	63.9	520.5
1973	387.3	101.3	138.2	29	72.5	728.0
1974	783.0	142.7	220.2	30	86.5	1262.8
1975	588.0	139.0	139.0	32	76.0	974.0
1976	736.0	102.4	287.4	42	83.5	1251.1
1977	654.1	135.8	389.9	51	86.2	1317.4
1978	575.2	120.8	424.8	50	75.2	1245.6
1979	823.8	109.8	385.3	55	97.2	1471.3
1980	990.5	124.1	225.3	105	125.3	1570.3
1981	903.6	143.4	177.8	106	129.3	1459.7
1982	1049.8	79.8	185.1	142	82.6	1538.9
1983	1169.1	103.8	140.1	118	51.9	1583.0
1984	1349.7	99.4	252.4	169	57.4	1928.2
1985	1418.2	161.9	311.3	196	50.8	2137.9
1986	603.4	161.6	292.5	238	47.3	1343.2
1987	395.0	145.7	191.5	262	57.8	1051.9
1988	498.2	152.6	151.1	261	56.7	1119.3
1989	590.7	190.4	139.4	234	56.6	1211.3
1990	655.2	217.8	121.5	201	67.5	1263.0
1991	540.1	335.7	104.5	272	84.4	1336.6
1992	608.8	294.6	70.1	287	109.5	1369.6
1993	578.9	261.9	92.4	283	198.6	1414.6
1994	611.8	304.7	230.7	338	257.1	1742.6

Notes: Export purchasing power was estimated by deflating current exports by the UN price index of manufactures exported by developed countries.

Sources: Banco Central del Ecuador, **Boletín Anuario** (several issues); Banco Central del Ecuador, **Información Estadistica Mensual** (several issues); United Nations, **Monthly Bulletin of Statistics** (several issues).

APPENDIX TABLE 2

IMPORTS BY MAIN KIND OF PRODUCTS (1968-1994)
(Million US$ and percentages)

Year	Total Imports US$(CIF)	Consumer Goods (%)	Agriculture Inputs (%)	Manufacturing Inputs (%)	Agriculture Capital Goods (%)	Manufacturing Capital Goods (%)	Other Products (%)
1968	255.5	14.6	1.9	39.6	2.6	16.3	24.9
1969	241.8	14.5	2.1	39.7	2.6	15.5	25.6
1970	273.8	13.2	2.0	42.4	2.8	15.3	24.3
1971	340.1	11.2	1.1	34.7	2.0	18.6	32.4
1972	318.6	14.5	1.4	33.1	1.4	24.0	25.6
1973	397.3	16.1	1.4	37.6	1.4	21.1	22.3
1974	678.2	15.0	3.8	37.5	2.1	18.1	23.5
1975	987.0	13.1	4.7	29.6	3.6	23.9	25.0
1976	958.3	11.2	3.1	32.8	3.1	26.2	23.6
1977	1188.5	12.0	1.8	33.7	3.1	24.4	25.0
1978	1505.1	13.5	2.1	29.7	3.0	27.1	24.5
1979	1599.7	13.0	2.0	31.6	1.9	27.8	23.8
1980	2253.3	10.8	2.6	32.3	1.7	22.8	29.8
1981	1920.6	10.4	2.2	27.0	1.8	26.5	32.0
1982	2424.6	11.3	2.5	32.4	1.4	24.1	28.3
1983	1474.6	12.4	3.4	45.2	1.5	23.7	13.8
1984	1630.0	11.1	4.0	43.5	0.9	17.4	23.1
1985	1766.7	8.6	4.1	43.5	1.9	19.2	22.7
1986	1810.2	9.4	3.5	40.1	1.9	22.5	22.6
1987	2158.1	9.7	2.4	36.7	1.3	23.2	26.7
1988	1713.5	9.6	3.6	41.3	0.7	23.6	21.2
1989	1854.8	9.9	4.9	45.2	0.7	21.0	18.2
1990	1861.7	9.6	4.6	43.6	1.4	20.2	20.7
1991	2398.6	10.6	4.8	41.2	1.0	22.1	20.3
1992	2430.4	16.3	4.7	34.4	0.8	22.6	21.2
1993	2562.2	22.8	3.3	30.6	0.7	23.7	19.0
1994	3642.2	23.6	3.4	28.0	0.6	17.9	26.5

Sources: Banco Central del Ecuador, **Boletín Anuario** (several issues); Banco Central del Ecuador, **Informacion Estadística Mensual** (several issues).

APPENDIX TABLE 3

INDIVIDUAL YEAR REGRESSION RESULTS FOR THE URBAN SECTOR

Dependent Variable: LOGSAL88

YEAR 1988

Multiple R	.68868
R Squared	.47428
Adjusted R Squared	.47225
Standard Error	.54713

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.039986	.012126	3.298	.0010
EDUCFOR2	.001635	5.5070E-04	2.969	.0030
EXPERIEN	.058945	.004573	12.889	.0000
EXPERIE2	-.001424	1.9869E-04	-7.167	.0000
EXPERIE3	1.02057E-05	2.3937E-06	4.264	.0000
FEMALE	-.247435	.020658	-11.978	.0000
INFORMAL	-.204577	.067102	-3.049	.0023
AGRICULT	-.223545	.080423	-2.780	.0055
DOMESTIC	-.668950	.086046	-7.774	.0000
PUBLIC	.275962	.111166	2.482	.0131
EDUCPUB	-.007974	.020942	-.381	.7034
EDUC2PUB	-6.65653E-04	9.2187E-04	-.722	.4703
DOMEEDUC	-.029239	.013149	-2.224	.0262
INFOEDUC	-.012868	.007340	-1.753	.0796
AGRIEDUC	.027692	.009269	2.988	.0028
(Constant)	9.352310	.071536	130.736	.0000

YEAR 1989

Multiple R	.67237
R Squared	.45208
Adjusted R Squared	.45022
Standard Error	.51257

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.020955	.010360	2.023	.0432
EDUCFOR2	.002614	4.7110E-04	5.550	.0000
EXPERIEN	.058031	.004014	14.458	.0000
EXPERIE2	-.001453	1.7493E-04	-8.305	.0000
EXPERIE3	1.05248E-05	2.1163E-06	4.973	.0000
FEMALE	-.245172	.017766	-13.800	.0000
INFORMAL	-.117171	.058752	-1.994	.0462
AGRICULT	-.068754	.066518	-1.034	.3014
DOMESTIC	-.541819	.078923	-6.865	.0000
PUBLIC	.218072	.101246	2.154	.0313
EDUCPUB	.003278	.018722	.175	.8610
EDUC2PUB	-.001354	8.1313E-04	-1.666	.0959
DOMEEDUC	-.011950	.011972	-.998	.3182
INFOEDUC	-.016609	.006208	-2.675	.0075
AGRIEDUC	.012102	.006685	1.810	.0703
(Constant)	9.282035	.061685	150.474	.0000

YEAR 1990

Multiple R	.65208
R Squared	.42520
Adjusted R Squared	.42069
Standard Error	.55457

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.015360	.016032	.958	.3381
EDUCFOR2	.003382	7.5643E-04	4.471	.0000
EXPERIEN	.053591	.006519	8.220	.0000
EXPERIE2	-.001197	2.8126E-04	-4.256	.0000
EXPERIE3	7.84738E-06	3.3314E-06	2.356	.0186
FEMALE	-.299658	.029791	-10.059	.0000
INFORMAL	.002487	.097627	.025	.9797
AGRICULT	-.024445	.097313	-.251	.8017
DOMESTIC	-.421785	.118731	-3.552	.0004
PUBLIC	-.010233	.160176	-.064	.9491
EDUCPUB	.044898	.030496	1.472	.1411
EDUC2PUB	-.003113	.001359	-2.291	.0220
DOMEEDUC	-.016703	.017454	-.957	.3387
INFOEDUC	-.030393	.011174	-2.720	.0066
AGRIEDUC	-.003605	.011557	-.312	.7551
(Constant)	9.214235	.093296	98.763	.0000

YEAR 1991

Multiple R	.63415
R Squared	.40215
Adjusted R Squared	.39725
Standard Error	.60211

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.032373	.018691	1.732	.0834
EDUCFOR2	.002876	8.4080E-04	3.421	.0006
EXPERIEN	.060441	.006994	8.642	.0000
EXPERIE2	-.001392	3.0136E-04	-4.620	.0000
EXPERIE3	9.40469E-06	3.5820E-06	2.626	.0087
FEMALE	-.240529	.032986	-7.292	.0000
INFORMAL	-.045240	.096805	-.467	.6403
AGRICULT	.123320	.118136	1.044	.2967
DOMESTIC	-.349388	.140679	-2.484	.0131
PUBLIC	.199816	.199712	1.001	.3172
EDUCPUB	-.003217	.037261	-.086	.9312
EDUC2PUB	-8.95771E-04	.001624	-.552	.5813
DOMEEDUC	-.029219	.020440	-1.430	.1530
INFOEDUC	-.015472	.010273	-1.506	.1322
AGRIEDUC	-.009285	.014429	-.643	.5200
(Constant)	8.987467	.112022	80.230	.0000

YEAR 1992

Multiple R	.65786
R Squared	.43278
Adjusted R Squared	.42923
Standard Error	.57319

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.021955	.015607	1.407	.1597
EDUCFOR2	.003405	7.1340E-04	4.774	.0000
EXPERIEN	.050507	.005961	8.473	.0000
EXPERIE2	-.001087	2.6371E-04	-4.124	.0000
EXPERIE3	6.57751E-06	3.2180E-06	2.044	.0411
FEMALE	-.258646	.026653	-9.704	.0000
INFORMAL	-.067919	.088392	-.768	.4423
AGRICULT	-.032332	.099985	-.323	.7464
DOMESTIC	-.350263	.118404	-2.958	.0031
PUBLIC	.194443	.165687	1.174	.2407
EDUCPUB	-9.76135E-04	.030414	-.032	.9744
EDUC2PUB	-.001269	.001316	-.964	.3349
DOMEEDUC	-.031043	.017557	-1.768	.0772
INFOEDUC	-.020502	.009463	-2.166	.0304
AGRIEDUC	.005366	.011965	.448	.6539
(Constant)	9.093374	.092419	98.393	.0000

JULY 1993

Multiple R	.65093
R Squared	.42371
Adjusted R Squared	.41615
Standard Error	.56654

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.016862	.021662	.778	.4365
EDUCFOR2	.003172	9.7998E-04	3.236	.0012
EXPERIEN	.037098	.008608	4.310	.0000
EXPERIE2	-5.24508E-04	3.8754E-04	-1.353	.1762
EXPERIE3	3.15905E-07	4.8038E-06	.066	.9476
FEMALE	-.232263	.038754	-5.993	.0000
INFORMAL	-.133175	.123686	-1.077	.2818
AGRICULT	-.103581	.135680	-.763	.4454
DOMESTIC	-.533516	.177192	-3.011	.0027
PUBLIC	.002818	.229845	.012	.9902
EDUCPUB	.037557	.042434	.885	.3763
EDUC2PUB	-.002781	.001833	-1.517	.1295
DOMEEDUC	-.016383	.025245	-.649	.5165
INFOEDUC	-.021494	.013297	-1.617	.1063
AGRIEDUC	4.79675E-04	.016154	.030	.9763
(Constant)	9.316741	.129005	72.220	.0000

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Multiple R	.65804
R Squared	.43302
Adjusted R Squared	.42937
Standard Error	.59737

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.011142	.014540	.766	.4436
EDUCFOR2	.003956	6.7228E-04	5.885	.0000
EXPERIEN	.056782	.006275	9.049	.0000
EXPERIE2	-.001292	2.8258E-04	-4.573	.0000
EXPERIE3	8.06370E-06	3.5040E-06	2.301	.0215
FEMALE	-.267806	.028781	-9.305	.0000
INFORMAL	-.060880	.087714	-.694	.4877
AGRICULT	-.081809	.100073	-.818	.4137
DOMESTIC	-.514082	.120635	-4.261	.0000
PUBLIC	.371330	.158279	2.346	.0191
EDUCPUB	.001253	.029531	.042	.9662
EDUC2PUB	-.002496	.001303	-1.916	.0555
DOMEEDUC	-.018151	.017440	-1.041	.2981
INFOEDUC	-.028149	.009286	-3.031	.0025
AGRIEDUC	-4.48247E-04	.011959	-.037	.9701
(Constant)	9.246056	.086491	106.902	.0000

Meaning of variable names:

LOGSAL88: Natural Logarithm of Wages (Nov-1988 sucres/month)

EDUCFOR: Years of formal education.
EDUCFOR2: EDUCFOR squared.
EXPERIEN: Years of experience.
EXPERIE2: EXPERIEN Squared.
EXPERIE3: $(EXPERIEN)^3$.
FEMALE: Dummy for females.
INFORMAL: Dummy for informal sector.
AGRICULT: Dummy for agricultural workers.
DOMESTIC: Dummy for domestic servants.
PUBLIC: Dummy for public servants.
EDUCPUB: (PUBLIC) x (EDUCFOR) interaction.
EDUC2PUB: (PUBLIC) x (EDUCFOR2) interaction.
DOMEEDUC: (DOMESTIC) x (EDUCFOR) interaction.
INFOEDUC: (INFORMAL) x (EDUCFOR) interaction.
AGRIEDUC: (AGRICULT) x (EDUCFOR) interaction.

Note: Workers with very low wages (lower than 3000 sucres/month) and very high estimated experience (greater than 70 years) were excluded from the regression.

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

APPENDIX TABLE 4

SIMPLIFIED REGRESSION MODEL FOR WAGES AS A FUNCTION OF EDUCATION AND EXPERIENCE

Dependent Variable: LOGSAL88

Multiple R	.64724
R Squared	.41892
Adjusted R Squared	.41866
Standard Error	.57041

---------- Variables in the Equation ----------

Variable	B	SE B	T	Sig T
EDUCFOR	.070724	.001168	60.571	.0000
EXPERIEN	.040531	.001030	39.359	.0000
EXPERIE2	-5.58766E-04	2.0186E-05	-27.681	.0000
FEMALE	-.257379	.009842	-26.151	.0000
INFORMAL	-.289804	.012543	-23.105	.0000
AGRICULT	-.029645	.018065	-1.641	.1008
DOMESTIC	-.641765	.018764	-34.202	.0000
PUBLIC	.056842	.010964	5.184	.0000
(Constant)	9.161029	.018109	505.886	.0000

Meaning of variable names:

LOGSAL88: Natural Logarithm of Wages (Nov-1988 sucres/month).

EDUCFOR: Years of formal education.
EXPERIEN: Years of experience.
EXPERIE2: EXPERIEN Squared.
FEMALE: Dummy for females.
INFORMAL: Dummy for informal sector.
AGRICULT: Dummy for agricultural workers.
DOMESTIC: Dummy for domestic servants.
PUBLIC: Dummy for public servants.

Note: Workers with very low wages (lower than 3000 sucres/month) and very high estimated experience (greater than 70 years) were excluded from the regression. Regression includes urban wage earners, from 1988 to 1993.

Sources: INEM and INEC, Encuesta de Hogares (unpublished data base, several years).

APPENDIX TABLE 5

COMPARATIVE SOCIAL DEVELOPMENT INDICATORS FOR ECUADOR, PERU AND COSTA RICA (1990)

INDICATOR	ECUADOR	PERU	COSTA RICA
Life expectancy at birth (years)	66.0	63.0	74.9
Adult illiteracy rate (%)	14.2	14.9	7.2
Average scholarly (years)	5.6	6.4	5.7
Infant mortality rate for children under 5 years (per 1000 live births)	83	116	22
UNDP Human Development Index (from 0 to 1)	0.641	0.600	0.842

Source: UNDP, **Human Development Report**, 1992.

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